

\$1.75

Current History

A WORLD AFFAIRS MONTHLY

OCTOBER, 1978

THE SOVIET UNION, 1978

RECEIVED

SOVIET MILITARY POLICY IN THE 1980's.....	John Erickson	97
THE SOVIET CONSUMER IN THE BREZHNEV ERA.....	Jane P. Shapiro	100
SOVIET SCIENCE AND TECHNOLOGY.....	Jeanne P. Taylor	104
THE SOVIET ECONOMY.....	Robert C. Stuart	109
SOVIET POLICY IN THE MIDDLE EAST AND AFRICA.....	O. M. Smolansky	113
SOVIET-AMERICAN RELATIONS: NOTES ON DÉTENTE.....	Jeremy R. Azrael	117
MOSCOW AND PEKING SINCE MAO.....	Harold C. Hinton	120
BOOK REVIEWS • <i>On the Soviet Union</i>		123
THE MONTH IN REVIEW.....		139
MAP • <i>The Soviet Union</i>		Inside Back Cover

Current History

FOUNDED IN 1914

OCTOBER, 1978
VOLUME 75 NUMBER 440

Editor:

CAROL L. THOMPSON

Associate Editor:

VIRGINIA C. KNIGHT

Assistant Editors:

MARY M. ANDERBERG

JOAN M. ANTELL

Contributing Editors:

ROSS N. BERKES

University of Southern California

RICHARD BUTWELL

Murray State University

O. EDMUND CLUBB

U.S. Foreign Service Officer (retired)

HANS W. GATZKE

Yale University

MARSHALL I. GOLDMAN

Wellesley College

NORMAN A. GRAEBNER

University of Virginia

OSCAR HANDLIN

Harvard University

STEPHEN D. KERTESZ

University of Notre Dame

RICHARD H. LEACH

Duke University

NORMAN D. PALMER

University of Pennsylvania

JOHN P. ROCHE

Fletcher School of Law and Diplomacy

A. L. ROWSE

All Souls College, Oxford

ALVIN Z. RUBINSTEIN

University of Pennsylvania

FREDERICK L. SCHUMAN

Portland State University, Emeritus

RICHARD VAN ALSTYNE

University of the Pacific

COLSTON E. WARNE

Amherst College, Emeritus

ARTHUR P. WHITAKER

University of Pennsylvania, Emeritus

President and Publisher:

DANIEL G. REDMOND, JR.

Vice President:

ELBERT P. THOMPSON

Current History (USPS140440) is published monthly (combined issues May/June and July/August) for \$14.50 per year by Current History, Inc., Publication Office, 4225 Main Street, Philadelphia, Pa. 19127; Editorial Office, RR 1, Box 132, Furlong, Pa. 18925. Second class postage paid at Phila., Pa., and additional mailing offices. Postmaster: send address changes to Current History, 4225 Main Street, Philadelphia, Pa. 19127. Indexed in The Reader's Guide to Periodical Literature, The Abridged Reader's Guide, PAIS and SSCI. Individual copies may be secured by writing to the publication office. No responsibility is assumed for the return of unsolicited manuscripts. Copyright ©1978, by Current History, Inc.

Coming Next Month

Japan

How stable is Japan's society and economy? Why are her trade relations with the rest of the industrialized world showing signs of strain? How is the relationship between Japan and the People's Republic of China changing? Questions like these will be carefully evaluated in our November, 1978, issue. Articles will explore:

Japanese-American Relations

by HIDEO SATO, Yale University

Sino-Japanese Relations

by HARUHIRO FUKUI, University of California at Santa Barbara

Japan's Trade Controversy with West Europe

by ROBERT S. OZAKI, California State University at Hayward

Japan's Beleaguered Ruling Party

by MARGARET A. MCKEAN, Duke University

Japan's Search for Food Security

by MICHAEL W. DONNELLY, University of Toronto

The 1973-1978 Stagflation in Japan

by KOJI TAIRA, University of Illinois

Japanese Universities and Students Today

by W. SCOTT MORTON, Emeritus, Seton Hall University

\$1.75 a copy • \$14.50 a year

Canada \$15.50 a year • Foreign \$16.00 a year

Please see back cover for quantity purchase rates.

NO ADVERTISING

Current History

OCTOBER, 1978

VOL. 75, NO. 440

How strong is the Soviet military? How successful is recent Soviet diplomacy? How contented is the Soviet consumer? Questions like these are answered in this study of the Soviet Union today. Writing of Soviet defense and the Soviet military, our first article notes that Soviet leaders "understand détente as a means to manage any dangerous collision that might induce nuclear war"

Soviet Military Policy in the 1980's

BY JOHN ERICKSON

Director of Defence Studies, University of Edinburgh

LET us suppose—quite hypothetically, of course—that we must report to Marshal of the Soviet Union Leonid Brezhnev on the present state of the Soviet armed forces, all the while suppressing a wry smile at that ponderous title of “marshal” and covering a discreet yawn at this public elevation to the post of “supreme commander,” so coyly disclosed to the world at large.¹ First and in full conformity with the conventions of deference, we should perforce refer ourselves to Brezhnev’s political pronouncements, in this instance his speech to the Fifth Congress of the Polish United Workers party in November, 1968, when he observed that “the balance of forces on a worldwide scale continues to tilt in favor of socialism and its allies.” The burden of any current submission by the Soviet command must be that this observation and other similar statements have been given military reality as well as political substance, since Soviet strategic power continues to expand and is generally being accorded primacy over that of the United States.

Once this burst of self-congratulation and stylized adulation is over, however, the matter becomes more serious. While expressing general satisfaction with the outcome of SALT-1 (the first Strategic Arms Limitation Talks), Soviet military leaders must now be

concerned with the strategic nuclear balance and the course of the SALT-2 negotiations. While “superiority” has useful political connotations and propaganda value, it is possibly more purposeful for military-operational estimates to be cast in terms of real equality (“parity”) and “useful advantage.” Here SALT-2 has obviously a major role to play in confirming the gap between United States vulnerability and the Soviet search for pronounced invulnerability, in hobbling as far as possible American technological innovation and in assisting Soviet strategic intelligence with regard to American programs. (The same principles would apply to the United States-Soviet talks on an anti-satellite “killer” program.) The numbers game continues to be of paramount importance, though this kind of parity (with a built-in Soviet advantage) is coupled with an adamant Soviet insistence on denying unilateral advantage—for example, the contest over the deployment of mobile missiles and the testing (as opposed to the deployment) of a new land-based missile, thus bringing the suggested United States MX missile into conflict with a new Soviet ICBM (intercontinental ballistic missile) on the point of being deployed. Here the Soviet Union could trade a concession over a missile in return for acceptance of Soviet interpretations of the role and performance of the Soviet BACKFIRE bomber.

Meanwhile, the Soviet strategic weapons program can count up some impressive achievements; in addition to the numerical advantage secured under SALT-1, Soviet expansion has achieved parity (and possibly more) in the number of submarine-based launchers, in the overall number of ICBM’s and

¹Brezhnev was publicly identified as Chairman of the Defense Council in April, 1976 (see *Krasnaya Zvezda*) in *l’oennyi Vestnik*, no. 10, 1977, p. 10. Colonel General G. Sredin, First Deputy Chief/MPA refers liturgically and almost casually to Brezhnev as “Verkhovnyi Glavnokomanduyushchii,” “supreme commander,” a designation last used by Stalin and sometimes rendered as “generalissimo.”

bombers as well as useful advantage in the capability to destroy hard targets and counter-military potential, namely, the capability to retaliate after sustaining a nuclear strike. The current and potential organization of the Soviet strategic forces also provides much food for thought; in brief, force structures will continue to be configured to furnish what Western analysts describe as a first-strike capability or to circumvent the neutralization of Soviet systems with the advent of the United States MX missile and the Trident-armed OHIO-class SSBN's (ballistic missile-launching submarines), both goals part of the Soviet "disarming strike/survival/war waging" posture.

Thus far, the combination of Soviet negotiating strategies, numerical expansion and marked improvement in missile accuracy and yield has certainly eroded, if not actually eliminated, an American "usable first strike capability"—and the Soviet command intends to keep it that way. The SALT-2 negotiations envisaged some reduction in the overall number of strategic delivery vehicles in general and MIRV-ed (multiple independently targeted re-entry vehicles) systems in particular.² But Soviet insistence gained the U.S.S.R. exemption for one large single re-entry vehicle missile and permitted the RSM-52 SLBM (submarine-launched ballistic missile) designed to fit the 24-tube TYPHOON class of SSBN, allowing in turn an American option on the Trident 2 (D-5) SLBM.

In addition, the Soviet military still preserves its heavy bombardment force that could well comprise between 200 and 250 8-10 MIRV SS-18 ICBM's (with their 16,000 pound payload, improved guidance and modified bus design to spin the re-entry vehicles [RV's] for greater accuracy), possibly 400 SS-17's (4 RV's) and the more successful SS-19 (6 RV's) to

²The American preference was reportedly for a ceiling of 2,160 on missiles and bombers (with an upper total of 1,200 for land- and sea-based MIRV-ed systems), while the U.S.S.R. argued for a higher overall ceiling (2,250) and 1,250 for MIRV-ed systems: a suggested Soviet compromise was that the United States might have one of its preferred totals, but not both.

³A new type of ICBM is reported to be under development to replace the SS-11, a step on which the Russians insisted; meanwhile the SS-16 will presumably replace the 60 earlier SS-13 ICBM's.

⁴Counting Soviet missile nuclear-powered submarines seems to present a number of problems, not least whether or not the Soviet Union is in breach of the SALT-1 provisions: the U.S.S.R. is allowed 62 SSBN's with 950 missiles, but 64 boats have been identified and the number of missile-armed boats may be as high as 70, although again the Soviet Navy may be within SALT limits in terms of what constitutes a "modern" boat—counting off the older HOTEL-class brings the figure down to 60, or 61 at the most. Taking the Y-class, D-I and D-II class boats (with 12 and 16 tubes respectively), and the deployed strength, then the Soviet Navy has 544 SLBM's on Y-class boats, and if the additional boat is a D-II, then the total SLBM strength reaches just 900.

replace the SS-11's that previously formed the largest numerical component of the Soviet land-based ICBM force.³ However, it is feasible that the Soviet command might choose to replace 400 SS-11's by non-MIRV-ed SLBM's and that new SSBN's with new missiles (like the RSM-52) would furnish a wholly new MIRV-ed SLBM force in its own right,⁴ thus making deep inroads into what has been an American advantage.

Whatever the implications of these mixes, the Soviet military can point to the eventual emergence of "useful advantage" in terms of hard-target kill capability (3:2 in Soviet favor), a numerical advantage in land-based ICBM's and bombers of 2:1 (with the United States advantage in bombers effectively cut by reckoning on BACKFIRE, though this is precisely the type of advantage the Soviet military wishes to foreclose). There will still be an American advantage in the total number of multiple warheads, but this gap could be closed by a judicious mix of the SS-17/SS-19 land-based ICBM force, plus exploitation of the RSM-52.

The Soviet military can argue, therefore, that the central strategic superpower relationship is undergoing rapid, even dramatic transformation in Soviet favor. Some 820 MIRV-ed SS-18's, -17's and -19's—facing 550 Minuteman III with the MK 12 warhead—could strike United States silos, Strategic Air Command (SAC) bases and command and control centers, while at the same time the Soviet Union has an initial capability to blind early warning systems by means of anti-satellite vehicles. In addition, the SLBM force could mount a "pin-down" attack in certain circumstances, but its growing power and diversity render it a strategic reserve in its own right. Thus, expansion goes with diversity, and even if the Soviet Union is not moving towards a carbon-copy of the "triad" concept, its BACKFIRE bomber (and its more advanced successor) is a valuable adjunct to diversification.

Soviet "deterrence" hereby assumes its full and viable form; deterrence is *ab initio* that military capacity to wage nuclear war that maximizes survivability rather than trading vulnerabilities, accompanied by a process of active constraint of any United States resort to nuclear weapons and, should even that constraint fail, at least matching if not actually overwhelming United States options. It is this circumstance that does not allow too much oversimplification in the use of "first-strike" and/or "superiority" in describing Soviet strategic programs.

Meanwhile, Marshal Brezhnev will have been well and truly appraised of developments in strategic defense, not least the existing ABM system with its four 16-launcher sites round Moscow and research and development for a future system—one rapidly deployable—using phased-array radar acquisition and tracking radars together with a new high-altitude anti-missile missile, even as the early warning network and the battle-management radars for the existing

ABM defense are being expanded. The air defense (PVO Strany) interceptor force has been substantially modernized and the inventory of some 2,600 aircraft has been qualitatively improved with the introduction of the MiG-25 (FOXBAT-A) and the MiG-23 (FLOGGER-B), all marking greater interest in the manned interceptor (with short-range, visually aimed weapons as additional armament) as opposed to blind faith in the SAM (surface-to-air missile). The great need at the moment is for an aircraft to detect, track and destroy intruders at *low altitude*, where the defense is at its weakest.

There is also the problem of the United States cruise missile, which, while not suited to surprise attack purposes, could be employed in a mass 4,000-round saturation attack. In a sense, the cruise missile problem highlights a whole series of anomalies in the Soviet air defense system—including early warning networks, airborne fire-control radars and missile homing warheads for a whole range of detection, tracking and target engagement. Already PVO Strany is developing mobile radar platforms using both CW (continuous wave) and pulse Doppler modes to operate in conjunction with the hypersonic Mach 5 SA-10 missile near to deployment, if not actually deployed, but the effort must be vast to succeed.

Passive defense, with civil defense to the fore, has been much advertised in Western circles, but probably the Soviet explanation is correct—namely, that passive defense is neither on such a scale nor of such intensity as to alter the strategic equation. Begun in the mid-1950's, the civil defense program gathered momentum in the late 1960's and now absorbs a full-time administrative apparatus of some 100,000. But realism intrudes to argue that while an essential command/operational leadership group could be protected in substantial fashion—about 100,000 individuals—the aim is not and cannot be the overall protection of the Soviet population, save by cumbersome and time-consuming city evacuation. Less than one-fourth of all Soviet workers can be accommodated in shelters, and even if the workers are protected there is no guarantee that their plants and factories will emerge relatively unscathed, despite all the rudimentary protection and the relatively primitive dispersal pattern that has been adopted.

Whether this amounts to a “post-attack recovery capability” is very much open to doubt, a doubtful proposition deepened by the general disinterest of the Soviet population at large. The least the Soviet command can do is to organize extensive war exercises lasting 10-14 days, deploying to war stations and carrying through the assignment of key political, military and managerial personnel to their survival/shelter stations distributed amidst the hardened command posts located within 80 miles of Moscow.

To test the command and control system is one

thing. To argue that this constitutes a form of invulnerability—or substantially diminished vulnerability—is another matter, ignoring whispered but real Soviet misgivings about the viability and the survivability of the system as a whole, whatever the degree of mechanistic redundancy and hardening built into it, not to mention that overwhelming sense of *déjà vu* born of the nightmares of 1941-1942. While civil defense measures are designed to reduce casualties through simple precaution and elementary prophylaxis, it has escaped the attention of many abroad that it is also configured to cope with a high casualty rate. No wonder the average Soviet citizen shrugs.

Brezhnev will understand that the general level of effort in the defense field can be maintained, save for the cyclical dips due to the present demands of the ICBM program, the nuclear submarine program and the acquisition of modern aircraft. The Ground Forces can probably override the demographic slump in the early 1980's. Equipped with a new main battle tank (the T-64/T-72), they can concentrate on modernizing the artillery component with self-propelled guns now that the mania for battlefield air defense missiles is subsiding. Nonetheless, the Far East will be a heavy fiscal burden and will tax Soviet ingenuity about the potentiality of the motor-rifle division, among other things. How unique will the military organization—including special combined-arms teams—be in the Soviet Far East? The real catalyst for change in East and West alike is the Soviet Air Force, a recipient of much largesse in terms of money; there is visible evidence of both quantitative and qualitative improvement, particularly vis-à-vis the North Atlantic Treaty Organization (NATO).

For the past few years, NATO air forces have been posing an unpalatable threat, enhanced by the air-to-air capability of the F-16, F-111 interdictors out of Soviet range and the air superiority of the F-15, not to mention that ground-hugging A-10. Now the Su-19 (FENCER) plus the variants of the MiG-23 mean that Soviet tactical aviation can at last meet its technological and operational requirements. In addition, SAF transport capability has been vastly improved and the helicopter force, with the Mil Mi-24 in the van, has real operational significance. Air Chief Marshal Kutakhov can no doubt justify his previous stance: let the SAF (Strategic Air Force) learn the latest flying techniques, command the logistics of introducing new advanced combat aircraft and then

(Continued on page 135)

John Erickson is the author of numerous books and articles on Soviet and East European military history and military affairs. His latest book is *Road to Stalingrad: Stalin's War with Germany*, vol. 1 (New York: Harper and Row, 1975). In 1971-1972, he was Lees-Knowles Lecturer at Trinity College, Cambridge.

"The Soviet Union has entered the consumer age; despite the ideologically inspired directives with regard to rational consumption needs and norms, the Soviet consumer's self-defined needs rather closely resemble those of his Western counterpart."

The Soviet Consumer in the Brezhnev Era

BY JANE P. SHAPIRO

Visiting Professor of Foreign Affairs, National War College

The Council of Ministers believes that the [1978] plan's assignments for consumer goods' production should be regarded as a minimum.

N. K. Baibakov
Chairman, State Planning Commission
December, 1977

FOR the past dozen years, the regime of Leonid Brezhnev has sought to increase the production and distribution of consumer goods and services to the Soviet people substantially.¹ The policy of substantially improving real wages, promulgated in the late 1960's, provided the population with greater disposable income; this, coupled with increased contacts with and knowledge of Western living standards, triggered popular demand for more and better goods, conveniences and services. As one Soviet sociologist observed, "People do not equate a rising standard of living with watching their money pile up, but rather with being able to spend it on things they need."² Clearly, the political leadership and its economic advisers must satisfy popular demand in some measure. While Soviet citizens have been socialized into expecting long shopping lines, time-consuming shopping expeditions, scarce and poor quality goods, and lack of repair and maintenance facilities, they are apparently increasingly less willing to accept these inconveniences indefinitely.*

In addition to expanding the availability of goods, the regime has had to try to improve the quality and assortment of goods to avoid heavy financial loss because it is difficult to dispose of poor quality

*This article is part of a study of consumer policies adopted by the regime of Leonid Brezhnev since the mid-1960's. The research was begun while the author was a Senior Research Fellow at the Russian Institute, Columbia University, 1974-1975.

¹For discussion of the consumer issue during the Khrushchev era, see, Philip Hanson, *The Consumer in the Soviet Economy* (Evanston: Northwestern, 1968); and Margaret Miller, *Rise of the Russian Consumer* (London: Institute of Economic Affairs, 1965).

²V. T. Yefimov and G. I. Mikerin, "Motorization in a Developed Socialist Society," *Sotsiologicheskie issledovaniia*, 1 (January-March, 1976), p. 136.

merchandise. The Soviet consumer is no longer an eager buyer regardless of the quality of goods for sale. Thus, economic planners now pay increasing attention to the quality, attractiveness and salability of goods. They are also considering future consumer demand and paying some attention, both short and long term, to consumer forecasting.

Consumers do not seem especially troubled if retail prices of attractive goods are high, perhaps because there is relatively little on which they can spend their disposable income. More commodious or better quality housing is generally unavailable, regardless of cost, as are lavish household goods; travel, apart from the allotted vacation period, is restricted, and private individuals are not allowed to travel abroad. Discussion in the Soviet press indicates that most consumers do not willingly consign a sizable portion of their disposable income to savings bank accounts, although the volume of deposits has increased more than fourfold during the past decade. (Compulsory state savings bonds purchase was abolished in 1958.)

While the regime favors personal savings, it has not encouraged the current level of savings deposits. Consumers apparently prefer to save their rubles for high-priced goods, like automobiles, that cannot be bought on credit and must be paid for before delivery. Indeed, despite the ever-increasing price of the popular Zhiguli and the more expensive Volga and the costs and accompanying inconvenience of scarce service and maintenance facilities, waiting lists for automobiles continue to lengthen. The March 1, 1978, doubling of gasoline prices to 15-20 kopeks a liter and the 35 percent increase in the cost of spare parts and repair work had little noticeable effect on the demand for automobiles. Unless he bribes the sales organization, a would-be purchaser may have to wait three to five years or longer for his automobile.

Now that it has begun to meet consumer demand in a variety of sectors, the regime has stimulated rising popular expectations that it dare not curtail too drastically during the current (1976-1980) five year plan period. The plan's parameters in the consumer

and consumer-related sectors may be extended in order to respond to consumer demands, if planners have underestimated the necessary investment.

THE FRAMEWORK: THE 1965 REFORMS

The 1965 economic reforms, designed primarily to promote greater industrial efficiency and productivity, included a new emphasis on product quality and enterprise profitability, especially in the light consumer goods sector. Enterprises were held financially responsible for their shoddy-quality or unappealing merchandise if it remained unsold in retail stores. Indeed, according to the Statute on the Enterprise, effective October, 1965, consumer goods enterprises were to plan production on the basis of retail store orders.³ The wholesale pricing system was revised in 1966-1967, partly to encourage the "improved quality, durability, and dependability of products."⁴ Not surprisingly, there has been considerable difficulty in implementing a program that linked industrial production directly with retail sales. In the spring of 1974, the party's central committee reiterated its call for production based on the volume of orders filled by trade organizations.⁵

The reforms, initially instituted on a very limited basis in mid-1964, just before the ouster of Premier Nikita Khrushchev were expanded gradually each year to include an ever greater number of light industrial enterprises. By 1970, more than 90 percent

³Abraham Katz, *The Politics of Economic Reform in the Soviet Union* (New York: Praeger, 1973), p. 131.

⁴*Ibid.*, pp. 131, 160-72.

⁵*Pravda*, April 27, 1974. See also Gertrude E. Schroeder, "Consumer Problems and Prospects," *Problems of Communism*, vol. 22, no. 2 (March-April, 1973), pp. 15-16.

⁶Gregory Grossman, "From the Eighth to the Ninth Five Year Plan," in Norton E. Dodge, ed., *Analysis of the USSR's 24th Party Congress and Ninth Five Year Plan* (Mechanicsville, Md.: Cremona Foundation, 1971), p. 54.

⁷See Kosygin's report to the 24th CPSU Congress, in which he noted that the Ninth Plan called for an increase in the volume of industrial goods' output of between 41 percent and 45 percent, and of light/consumer goods of between 44 percent and 48 percent. *Pravda*, April 7, 1971. At the same Congress, Brezhnev noted that it was now possible "to shift to a certain preponderance in the growth ratio of Group B [goods] . . . in order to ensure the planned upswing in the well-being of the working population." *Ibid.*, March 31, 1971.

⁸See Gregory Grossman, "An Economy at Middle Age," *Problems of Communism*, vol. 25, no. 2 (March-April, 1976), p. 23.

⁹See the general discussion of wage policies in Leonard Joel Kirsch, *Soviet Wages: Changes in Structure and Administration since 1956* (Cambridge: MIT Press, 1972). For a critique of the success in compensatory wages in less pleasant parts of the country, see Gertrude E. Schroeder, "Soviet Wage and Income Policies in Regional Perspective," *The Association for Comparative Economic Studies Bulletin*, vol. 16, no. 2 (fall, 1974).

¹⁰See Brezhnev's speech to the Central Committee Plenum, *Pravda*, October 26, 1976.

of Soviet light industry had been transferred to the new system, which was then extended to the transportation, construction, and service sectors.

Moreover, the last several five year plans have paid particular attention to the consumer goods sector of the economy. More investment was apportioned to this sector than ever before. Consumption goods production and sales reached considerably higher levels during the first post-Khrushchev five year plan (1966-1970) than they had during the previous Khrushchev-sponsored seven year plan.⁶ The recently concluded ninth plan (1971-1975) was the first in Soviet history in which planned growth in the light consumer goods industry and agricultural sectors (8.2 percent over the plan period) was to be greater than growth in the heavy industrial sector (8.0 percent growth over the same period.)⁷ Ultimately, however, heavy industrial growth surpassed light industrial and agricultural growth by 0.9 percent.⁸

A new emphasis on increased productivity through technological innovation and improvements, managerial advances, and worker incentives is a prominent feature of both the ninth and tenth (1976-1980) plans, and workers have been offered higher wages and broadened social welfare benefits. Another incentive is the improvement in the quality, attractiveness, assortment, and availability of consumer goods, which can be achieved only by means of greater state investment in these sectors. The availability of more goods is of little use to the citizen, however, unless he has the money to buy more than the basic necessities.

GREATER DISPOSABLE INCOME

In the late 1960's, the second post-Stalin wave of industrial workers' wage reforms was designed to establish an average level of earnings for categories of workers in each industry, to reduce the overfulfillment of work norms and the abundance of above-norm premium payments, to relate wages to skill and productivity, and to use wages as an incentive to work in less pleasant industries or parts of the country.⁹ Both the minimum wage and the general level of wages were raised substantially, beginning in 1968—a clear effort on the regime's part to provide more disposable income for the average citizen. Recently, the press announced the implementation of the first stages of Brezhnev's twenty-fifth congress (1976) declaration that wages will increase between 16 and 18 percent for industrial and white collar workers and between 24 and 27 percent for collective farmers. Low-paid sectors, including education, health, trade, consumer and municipal service employees, are scheduled to enjoy the first increases.¹⁰

Meanwhile, in the countryside, collective farmers' income, which had been sadly neglected or studiously ignored for more than three decades, dramatically increased over a handful of years. While the gap

between the incomes of collective farmers and state farmers has narrowed somewhat,¹¹ the gap between the incomes of industrial and agricultural workers remains great.¹²

Collective farm incomes have been increased substantially because overall agricultural price levels were far too low and were not adequate to cover the expenses of production, to assure necessary compensation to labor or to provide sufficient funds to increase fixed capital stock.¹³ Thus, in 1966, guaranteed pay levels for collective farmers were introduced, similar to those already in effect for state farmers. The 60 rubles per month minimum wage for industrial workers (which already covered state farm workers) was extended to collective farmers.¹⁴

Indeed, to encourage collective farmers' greater productivity through increased earnings, the regime has continually raised the purchase price of both planned and above-plan goods and has held basic procurement plans for agricultural and livestock goods constant over the plan period. Previously, the practice had been to raise the procurement volume each year without raising prices, especially in good harvest years.¹⁵ Toward this end, since the March, 1965, Central Committee Plenum's Decree, "On Urgent Measures for the Further Development of the USSR's Agriculture," the regime has issued a number of directives with significant financial support: 1) to reduce the sale price to collective farms of farm machinery and spare parts; 2) vastly to increase the state's investment in rural construction, including buildings and land reclamation projects; 3) to increase investment in chemical fertilizer production, to be available to collectives at reasonable prices when needed; and 4) to permit some flexibility in the size and use of private plots.

Clearly, there has been a revolution in the regime's official attitude toward private plots, embodied in Article 13 of the 1977 constitution; they are no longer merely tolerated as a vestige of the bourgeois past.

¹¹Karl-Eugen Wädekin, "Income Distribution in Soviet Agriculture," *Soviet Studies*, vol. 28, no. 1 (January, 1975).

¹²A. Teriaeva, "Necessary Labor and Its Payment in Agriculture," *Voprosy Ekonomiki*, 5 (1972).

¹³Morris Bornstein, "The Soviet Debate on Agricultural Price and Procurement Reforms," *Soviet Studies*, vol. 21, no. 1 (July, 1969), p. 3.

¹⁴David W. Bronson and Constance B. Krueger, "The Revolution in Soviet Farm Household Income, 1953-1967," in James R. Millar, ed., *The Soviet Rural Community* (Urbana: University of Illinois Press, 1971), p. 220.

¹⁵See Brezhnev's report to the Central Committee Plenum of July 2, 1970, *Pravda*, July 3, 1970. See also Stephen Osofsky, *Soviet Agricultural Policy: Toward the Abolition of Collective Farms* (New York: Praeger, 1974), p. 13.

¹⁶K. G. Pysin, *Sovetskaia Rossiia*, February 17, 1970.

¹⁷Central Committee decree, "On Raising Incentives for Sovkhoz and Kolkhoz Workers to Expand Livestock Production," *Pravda*, July 18, 1970. The higher prices were to be effective as of May 1, 1970.

TABLE 1: Gross Output of Agricultural Production
(at year's end, per 1,000 population)

	1965	1970	1974*	1975
Grain	121.5	186.8	195.7	140.1
Wheat	59.7	99.7	83.9	66.2
Rye	16.2	13.0	15.2	9.1
Corn as grain	8.0	9.4	12.1	7.3
Barley	20.3	38.2	54.2	12.5
Cotton, raw	5.7	6.9	8.4	7.9
Sugar Beets, refined	72.3	78.9	77.9	66.3
Potatoes	88.7	96.8	81.0	88.7
Vegetables	17.6	21.2	24.8	23.4
Hay and green fodder	82.5	110.3	130.7	115.8
Meat, killed weight	10.0	12.3	14.6	15.0
Beef, veal	3.9	5.4	6.4	6.4
Pork	4.2	4.5	5.5	5.7
Lamb, goat	1.0	1.0	1.0	1.0
Milk	72.6	83.0	91.8	90.8
Eggs, billions	29.1	40.7	55.5	57.5

*included to indicate magnitude of the 1975 shortfall.

Source: Tsentral'noe statisticheskoe upravlenie, *Narodnoe Khoziaistvo SSSR v 1975g* (Moscow: "Statistika," 1976), pp. 318, 320. Hereafter referred to as *Nar. Khoz. 1975*.

"The state and the collective farms [reads the Constitution] *provide assistance to citizens in auxiliary farming operations [italics mine]*."

GREATER FOOD AVAILABILITY AND VARIETY

The attention paid to expanding agricultural production was designed to raise farm family income and to begin to satisfy the growing demands of the population (particularly in densely populated urban areas) for a more plentiful and varied food supply throughout the year, especially in more northerly climates. The consumer demanded more meat, eggs, fresh vegetables and fruits, outward signs of the more mature and sophisticated dietary patterns that are associated with industrialized modernized societies.

Meat and poultry output has increased dramatically, largely because the regime has been paying higher prices to collectives and to farmers for their private plot livestock. Recognizing the reluctance of collective farmers to raise livestock because it is not so profitable as grain, the regime determined in early 1970 that more feed grains would be made available and that higher prices would be paid for privately owned livestock.¹⁶ In May of that year, procurement prices and above-plan bonuses were raised for livestock, poultry, milk and eggs.¹⁷

In terms of gross output, recent figures are impressive (see Table 1). Indeed, it could be argued that the primary reason Soviet leaders bought so much grain abroad (to be used for human and livestock consumption) when their own harvests failed to meet planned levels in 1972 and 1975, was to satisfy consumer demand at least partially and to postpone mass discontent. As Western observers have frequent-

ly noted, Soviet leaders doubtless heeded the lessons of the December, 1970, Polish strikes, which toppled the 14-year regime of Wladyslaw Gomulka and compelled the new Polish leadership to withdraw the price increases.

The United States Department of Agriculture has estimated that the total Soviet grain and soybean purchases for 1972-1973 were 30 million tons (of which 19.2 million tons were purchased from the United States).¹⁸ The Soviet Union also purchased one million tons of potatoes from Poland in October, 1972,¹⁹ and 200,000 tons of butter from the European Common Market in the spring of 1973.²⁰ In 1975, with a grain harvest of approximately 140 million tons, the smallest in a decade and far more disastrous than the 168.2 million ton harvest of 1972, the Soviet Union again bought heavily abroad in order to alleviate scarcities at home and to avoid an increase in retail prices for staples.

Yet in light of the fact that the average Soviet grain crop in the past decade was approximately 190 million-195 million tons, the 1975 shortfall amounted to 55 million tons, not easily made up, even by massive imports. Moreover, 215 million tons had been planned for the 1975 harvest. Despite large-scale foreign purchases, distress slaughtering of hogs and poultry could not be avoided because of the feed grain shortage. By October, 1975, the Soviet Union had reportedly purchased 12 million tons of grain from the United States and almost 4 million tons from Canada.²¹ It has been estimated that the regime has absorbed substantial subsidies, amounting to approximately 30 percent on meat and milk products, and almost 15 percent on vegetable and grain products, by

¹⁸*Foreign Agriculture*, vol. 11, no. 19 (May 7, 1973), p. 61; *ibid.*, vol. 10, no. 4 (October 9, 1972). The Soviets also contracted to buy wheat and other grains from Australia, France, and Sweden. All tonnage figures are metric. See also *The New York Times*, August 2, 1975; and Joseph Albright, "Some Deal," *The New York Times Magazine*, November 25, 1973. Some of the 1972-1973 purchases were shipped directly to other Communist-ruled states, the largest quantities to Czechoslovakia, Poland, and East Germany.

¹⁹*Foreign Agriculture*, vol. 10, no. 45 (October 23, 1972), p. 10.

²⁰*Ibid.*, vol. 11, no. 19 (May 7, 1973), p. 12.

²¹*The New York Times*, July 22, 1975, August 14, 1975, October 31, 1975. The 1976 grain harvest was one of the largest on record: 223.8 million tons, according to *The New York Times*, January 6, 1977.

²²Constance B. Krueger, "A Note on the Size of Subsidies on Soviet Government Purchases of Agricultural Products," *The Association for Comparative Economic Studies Bulletin*, vol. 16, no. 2 (fall, 1974), p. 64.

²³N. Lozhkina, "Housewares Produced by the Ministry of Heavy Power and Transport Machine Building," *Kommercheskii Vestnik*, 18 (September, 1974), p. 31. See also A. Andrushkevich, "Construction Materials Enterprises Work for the Public," *ibid.*, 1 (January, 1974); and G. Kiperman, "A 'Second Occupation' for Plants?" *Ekonomicheskaya gazeta*, 4 (January, 1976).

TABLE 2: Selected Consumer Durables Guaranteed to the Population

(all categories, millions of metric tons)

	1965	1970	1975
Watches, clocks	885	1193	1319
TV sets	68	143	215
Refrigerators	29	89	178
Washing machines	59	141	189
Vacuum cleaners	18	31	52
Sewing machines	144	161	178

Source: *Nar. Khoz*, 1975, p. 595.

maintaining stable retail prices while buying abroad and increasing state purchase prices domestically.²²

CONSUMER DURABLES AND SOFT GOODS

Along with a demand for more plentiful and more varied agricultural produce, the Soviet citizen has begun to demand greater availability of household appliances, finished wearing apparel and, more recently, private automobiles. In response to these demands, the regime has ordered a number of heavy industrial enterprises to produce consumer goods. Thus, the Khar'kov Turbine Plant produces kitchen knives, the Kalinin Railroad Car Building Plant, sofa beds, and the Il'marine Machine Building Plant, shashlyk forks and pokers as well as salt and pepper shakers.²³ The Soviet press continually complains that many consumer goods are poorly manufactured, are available only seasonally, and can be repaired with great difficulty only after a long waiting period. While total production figures are impressive (see Table 2), they tell us little about the quality, attractiveness, or regional availability of the products.

For example, despite the notable increase in refrigerator production, there is no indication of the size assortment. During the ninth plan period, the number of families that owned a refrigerator almost doubled, although the Soviet press reported that too many small-capacity models were produced and unsold, while too few large-capacity models were available for purchase. Moreover, according to the Main Adminis-

(Continued on page 128)

Jane P. Shapiro, Professor of Political Science at Manhattanville College, is on leave (1978-79) as Visiting Professor of Foreign Affairs at the National War College. She is co-editor of several volumes, including *Change and Adaptation in Soviet and East European Politics* (New York: Praeger, 1976), *From the Cold War to Detente* (New York: Praeger, 1976), and *Communist Systems in Comparative Perspective* (New York: Doubleday, 1974). She has published articles in *Canadian Slavonic Papers*, *Comparative Politics*, *Soviet Studies*, *Pacific Affairs*, and *Studies in Comparative Communism*, and is a managing editor of the journal, *Soviet Union*.

"Although there has been a leveling in the growth of research expenditures since 1965, Soviet investment in science is far greater than that of any other nation."

Soviet Science and Technology

BY JEANNE P. TAYLOR

Specialist on Soviet Technology

Soviet leaders have asked Soviet scientists to solve two problems: to maintain the prestige of the nation and the Soviet regime; and to keep Soviet growth rates above the rest of the world. The first—prestige—is easily won by means of Soviet achievements in space and other scientific displays. The second—the economic growth of the nation—can be assured by the steady transformation of the discoveries of science into new technology that will offset energy and labor shortages.

Soviet leaders believe that they can predict the new technologies based on expert forecasts, which have led to massive support to and control of the Soviet research community. In the Soviet Union, research costs have risen in greater proportions than the rise in the gross national product. Although there has been a leveling in the growth of research expenditures since 1965, Soviet investment in science is far greater than that of any other nation.

In the Soviet scheme, great control always accompanies massive support. The control takes many

forms: demands for specialization within the research community, promotion of favored research programs, tighter schedules for research progress, expectation of proofs of efficiency in operation, funding of research by means of more contracts and fewer grants, and an accounting in terms of rubles and manpower saved because of applied technology.

As the tenth five year plan unfolds, the nature of the increases in support and control are revealed, and so are some of the expectations for technologies related to energy and automation problems. Even basic or fundamental research is being guided to develop these technologies.

Since the revolution, Soviet leaders have been enthusiastic supporters of scientists as problem solvers for their society. As it has become more apparent that the fruits of science applied in technology are the key to economic growth, their enthusiasm has bordered on scientism, an unquestioned belief in human progress through scientific methodology and discovery. This belief has been voiced in the new constitution in articles 26 and 47.¹

Unlike other parts of the world that have reduced scientific funding, Soviet support for fundamental research is still very strong. At the twenty-fifth party congress, Secretary Leonid Brezhnev made it very clear that the Academies of Sciences, the chartered bodies of theoreticians, will continue to receive support. Nothing has changed that promise. A corresponding member of the Politburo and Secretary of the Central Committee, B.N. Ponomarev, addressing a jubilee session of the U.S.S.R. Academy in November, 1977, said much the same thing. This surety stems from 60 years of experience, which has led the Soviet leaders to see the importance of fundamental research.² Basic research is now part of the comprehensive plans for new technology and is allotted a time slot in such plans.

The Soviet leaders also expect outstanding achievements to add to Soviet national prestige, partly because Soviet economic affairs have not gone well enough to be a source of prestige.³ Although experts

¹Article 26: "In accordance with the needs of society, the state is providing a well-planned development of science and for the training of scientific personnel, is organizing the adoption of scientific research results into the national economy and other spheres of life." Quoted by B. Paton, "Increase the Potential of Science," *TRUD*, August 6, 1977, p. 2, translation in Joint Publications Research Service (JPRS), 69,890.

Article 47: "In accordance with the goals of communist construction, Soviet citizens are guaranteed the right of scientific, technical and artistic creativity. It will be secured by means of the extensive development of scientific research, invention, and rationalization activity and the development of art. The state will establish the necessary material conditions for this and give its support to voluntary societies and creative unions." Quoted by Yu. Maksarev, "The Basis of Technical Progress," *Sotsialisticheskaya Industriya*, June 28, 1977, p. 2, translation in JPRS 69,624.

²Not all students of science believe that there is a strong connection between discoveries of a fundamental nature and a new technology. That is a subject too complex to pursue here—but the Soviets do so believe.

³R. Hutchings, *Soviet Science, Technology Design: Interaction and Convergence* (London: Oxford University Press, 1976), p.

may differ as to the importance of highly supported fundamental research to economic growth, most agree that technical innovation does account for over half the economic growth of a nation.⁴ In the Soviet Union, economic growth is very dependent on labor productivity. During the tenth five year plan (1976-1980), more than 60 percent of the increase of labor productivity in industry and construction and half the increase in agriculture and rail transport are expected to be the results of increasing the technological level by one and one-half times.⁵ Moreover, by assuring a greater return on productive capital investment, progressive technology will allow for increased consumption by lowering the need for capital accumulation through savings.⁶

Soviet leaders apparently recognize that in a "mature or developed" society, to use Soviet wording, there is no simple scheme to create abundance for all. Their society is very complex, requiring a high degree of differentiation and specialization. The Soviets are applying the principle to research and development.

58. See also *Soviet Economy in a New Perspective*, a compendium of papers submitted to the Joint Economic Committee, 94th Congress of the U.S., 2nd session (Washington, D.C.: Government Printing Office, 1976); and "Soviet Economic Problems and Prospects," a paper by the Central Intelligence Agency, Directorate of Intelligence, July, 1977. Both discuss the Soviet need for technological advances.

⁴T.W. Harvey, "Technical Ventures—Catalysts for Economic Growth," *Battelle Today*, no. 5, August, 1977.

⁵V. Kamayev, "Review of Recent Books," *Kommunist*, no. 9, June, 1977, pp. 117-119, translated in JPRS 69,610.

⁶G. Sorokin, "The Soviet Economy in the Tenth Five-Year Plan," *Voprosy Ekonomikii*, no. 5, 1976, pp. 3-14, translated in *Problems of Economics*, no. 19, March, 1977, pp. 3-23.

⁷G.I. Marchuk, "Siberian Branch Work in Line with the Party's Wishes," *Sovetskaya Rossiya*, May 30, 1978, p. 1ff; and "Academy of Sciences Presidium Discusses Research for Siberia, Far East," *Izvestiya*, June 3, 1978, p. 3.

⁸E. Kosov and G. Popov, "Management of Interrelationships of Scientific-technical Programs" [Upravlenie mezhotraslevymi nauchno-tekhnicheskimi programmami] (Moscow), 1972, pp. 44, 48.

⁹P. Fedoseyev, "Strengthening Communication Between Science and Practice" [Krepit svyazi nauki i praktiki], *Kommunist*, no. 9, 1976, p. 38; V. Pokrovskiy, "The Effectiveness of Science and Technology," *Ekonomicheskaya Gazeta*, no. 32, August, 1977, p. 10, translation in *CDSP*, vol. 29, no. 34.

¹⁰O. Bobrakov, "Academician G. Marchuk Discusses Trends of Science," *Krasnaya Zvezda*, no. 34, February 9, 1978, p. 4.

¹¹S. Tikhomirov, "Achievements and Problems of Inter-Industry Technical Programs," *Pravda*, June 6, 1978, p. 3.

¹²V. Puzanov, "Comprehensive Scientific and Technical Programs," *Ekonomicheskaya Gazeta*, no. 35, August, 1976, p. 8; and M. Kovalev, "Inter-Industry Scientific and Technical Programs," *Krasnaya Zvezda*, no. 188, August 12, 1976. The use of this form was announced by a Gosplan official in 1974, along with program-target planning, a subject not discussed in this paper. It had been proposed by Gosplan officials in the two prior years.

Regional specialization, nationwide research and development programs in which each researcher is assigned a role and technology transfer from abroad (to fill in the gaps that would be too resource-consuming for Soviet development) are all forms of specialization. None are popular nor image-enhancing, but all are being pursued diligently by Leonid Brezhnev.

The regional or republic academies have been told to develop their own regions, not to try to duplicate the establishments in Moscow. For a long time, the illusion was fostered that the regional academies offered the same kinds of opportunities as did the favored U.S.S.R. Academy of Sciences. Today, the republic academies are expected to limit most of their major efforts to developing and utilizing the natural resources of their regions. The order was made very clear by Brezhnev's trip to the areas of Siberia and the Far East.⁷

Another structure for specialization is the interbranch (complex) comprehensive program, designed to meet some urgent national need. This form of administered research and development was first employed by the central planners in the early 1970's. During the ninth five year plan, at least 240 problems were structured, and 40 percent of all science expenditures were allocated to the solution of those problems.⁸ The problems were broken down by responsible government planners into some 3,000 individual tasks and projects and distributed. One ministry, for example, acted as the head ministry for solving problems for 14 programs. The U.S.S.R. had 100 programs (500 problems) to administer and distribute.⁹ Its Siberian branch participates in 105 programs.¹⁰

The tenth five year plan is far more specific, including a number of concrete programs. Some 200 programs have been formulated, encompassing approximately 6,000 tasks and projects. About 4,500 of these will result in actual models of new technology. The cost of these programs plus expenditures for what have been labeled the most important problems in the field of basic research, amount to one-fourth of the funds allocated for science.¹¹ They have been listed in the five year plan¹² and include the adoption by industry of the new technology. Moreover, the planning includes full budgeting for the entire period. The financing includes capital construction and material-technical supply as well as the necessary rubles for salaries and other costs. These plans are the result of interagency bargaining. Any disputes that cannot be resolved are arbitrated at the State Committee for Science and Technology (GKNT—Russian acronym).

The third specialization device—international technical transfer—is a subject of great interest to the United States, West Europe, and the Council for Mutual Economic Aid nations (COMECON). Natu-

rally, there is a greater degree of control by the Soviets in the bloc nations. As in the U.S.S.R., the bloc's scientific committees have been asked to specialize in their research and development activities.

In a publication that records trade and cooperative research agreements with the West, the extent to which Western specialists can augment Soviet technology is frequently discussed. For example, the Soviets do not have the technology to make the special turbine blades required in large aircraft engines, a technology perfected by Great Britain and the United States a decade ago. Therefore, it was reported, the chairman of British Rolls Royce met with the chairman of the Soviet Council of Ministers, Aleksei Kosygin, and with V.A. Kirillin, chairman of the State Committee for Science and Technology, to discuss the sale of engine models to the Soviets.¹³ If the report is true, it must have been a serious embarrassment to Soviet leaders.¹⁴

It is not clear to what extent the Soviet Union wishes to trade knowledge in research and development. Rather large cooperative projects have been mounted between the Soviets and the United States. The agreement to cooperate has been extended to 1982. Although some of the projects have been reduced, some have been expanded, and new projects are under consideration.

TECHNOLOGY DIFFUSION

The Soviets are aware of the problem of technology diffusion within their own borders. Despite overtures to the Western scientific community and to high-technology manufacturers of computers and aircraft engines, for example, there may be large groups of

¹³"Jumbo Jet Engines," *Eastwest Markets* (formerly *Russia Report*), March 3, 1977, p. 4.

¹⁴A conference at which engine building was discussed was held in March, 1978, by the Central Committee of the party and was attended by designers and directors as well as officials of the ministries. Presumably, the party wished to make it very clear that poor performance could not be tolerated. "Party Central Committee Urges Improvement of Internal Combustion Engines," *Sovetskaya Moldaviya*, no. 67, March 22, 1978.

¹⁵P. Hanson, *External Influences on the Soviet Economy since the Mid-1950's: The Import of Western Technology*, CREES Discussion Paper, RC/B7, Birmingham, 1974, p. 13.

¹⁶*Ibid.*

¹⁷"Moscow Committee Discusses Party's Role in Scientific Progress," *Vechernyaya Moskva*, June 25, 1977, p. 1.

¹⁸"Address of M.S. Suslov to General Meeting of the USSR Academy of Sciences on March 17, 1977," *Pravda*, March 18, 1977, p. 2; B.N. Ponomarev, "The Great October Revolution and the Development of Scientific Communism," *Voprosy Istorii*, no. 12, December, 1977, pp. 3-14, translation in JPRS, 70,748.

¹⁹See *Pravda*, December 14, 1975, and *Pravda*, March 6, 1976, for the draft and finished guidelines for the development of the USSR national economy in 1976-1980, which includes sections on science. These are translated in *CDSP*, vols. 27 and 28.

Soviet scientists and technologists with a vested interest in keeping out foreign innovations that render their activities obsolete.¹⁵

It would not be difficult for such groups to manipulate the Soviet structure to slow down imports and diffusion of technological innovation, effectively checking party desires for specialization. The existing institutional barriers are many: lack of incentives, separation of research from production, a skewed pricing system, low depreciation rates, to name some of the familiar roadblocks.¹⁶ There have been many attempts to eliminate the barriers; however, they are only partially successful. Research has been moved close to production in the Siberian branch of the Academy of Sciences and through many research-production associations. Incentives have been devised or are under discussion to encourage entrepreneurs to take chances on new products. Depreciation rates have been rationalized to some extent. All these important factors, which result in institutional and indirect support and control of Soviet science, have been pushed by the party.

The complex interbranch program was designed to meet the needs of the nation and the party articulates those needs. However, it is at the pre-articulation stage that the scientific community explains its needs to the party. As long as the party equates the needs of science with the needs of society, there is little conflict as to the substance of the research. Emphasis, however, is another thing. Almost any research one could imagine is going on somewhere in the Soviet Union, albeit in an obscure laboratory in a republic university. Obscure though it may be, every laboratory has state support, either direct or indirect. But big science using big funds and resources is a matter to negotiate. It is here that the party and government are joined by the scientific community in a kind of checks and balances system. Support and control are not mono-directional.

The party explains its desires in formal and informal meetings with the research community, which includes a large percentage of party members, of whom not all are nominal. Some owe their positions of power to their party affiliation, and they pay their dues with fervor. Party organizations at scientific research, design, and higher educational institutions include some 174,000 party members in the Moscow area alone.¹⁷ Top party leaders address the general meetings of the U.S.S.R. Academy of Sciences. M.A. Suslov, a member of the Politburo, addressed the academy in March, 1977, and B.N. Ponomarev, a candidate member of the Politburo, followed in November of that year.¹⁸

When the party meets in congress or as represented by its central committee before the five year plans are drawn up, guidelines are set for the course of research.¹⁹ In Ponomarev's words, "The party does not

dictate to the scientists the details of the scientific subject matter, ways and methods of the research, since this is a matter for the scientists themselves. The chief [or main] directions [or guidelines] of the development of science and the chief problems posed by practice are determined jointly. It cannot be otherwise, since the party members are the leading force in the scientific collectives, and a number of eminent scientists are members of the Central Committee and deputies of the Supreme Soviet."²⁰

To study substantive problems that science or technology hopes to solve, councils are attached to the Soviet and republic Academies of Sciences and to the State Committee for Science and Technology, the central agency of the Soviet Council of Ministers. Most members of the problem councils are party members, but the councils also include researchers and even executives from the industrial sectors. The deliberations of these councils are not on public record. We can see the accumulated results only at conferences sponsored by them, or in final form, in party articulations.²¹

Party approval is most important. When a whole new application of technology to production comes about, a huge shift in investment is necessary. Only the party can shift funds from agriculture, defense, consumption, or education to the new comprehensive programs. There is no agency—not even the State

²⁰Ponomarev, *op. cit.* For a more complete discussion of the significance of the seemingly generalized main directions articulated by the party, see J.P. Young and J.P. Taylor, "Science and Technology Policy in the USSR: Impact of the Changing Character of Soviet Science and Technology on Its Administration," in J. Haberer, ed., *Science and Technology Policy: Perspectives and Developments* (Lexington, Mass: Lexington Books, 1977), pp. 197-204.

²¹Three sets of recommendations coming from problem councils and Academy Departments are: Regional Socio-economic Development of the U.S.S.R. Over the Long Run to 2000 and the Formation and Development of the Large National Economic Complexes; Scientific Bases for Preserving and Improving the Natural Environment and the Rational Utilization of Natural Resources; and Methodology of Determining the Economic Effectiveness of Utilization of New Equipment, Inventions and Proposals for Improving Production Methods in the National Economy. S. Melikhov, "At the Annual Meeting of the Department of Economics, AN SSSR," *Mirovaya Ekonomika i Mezhdunarodnyye Otnosheniya*, no. 7, July, 1977, pp. 129-131, as translated in JPRS 69,884.

²²"Scientific-technological Progress," editorial, *Pravda*, July 10, 1976, p. 1.

²³R. Amann, J. Cooper, and R.W. Davies, eds., *The Technological Level of Soviet Industry* (New Haven: Yale University Press, 1977), p. 27.

²⁴N.P. Fedorenko, "Theoretical and Methodological Problems," *Ekonomika i Matematicheskiye Metody*, no. 4, July-August, 1977, pp. 621-630, translation in JPRS 69,890; JPRS 70,394.

²⁵"Brezhnev's Speech to the Ceremonial Meeting," *Pravda*, November 3, 1977, translation in CDSP, vol. 29, no. 44 (Nov. 30, 1977).

Planning Committee (Gosplan) or the State Committee for Science and Technology (GKNT)—that has this overall, intersectional power. Disruptive campaigns initiated at the Politburo level have been institutionalized into planned programs of development, anticipating as many specific opportunities, costs, and benefits as possible.

Before the announcement of the scientific goals in the current five year plan, *Pravda* listed previous accomplishments, areas where the Soviet Union lagged, and areas where successes were hoped for but not guaranteed. The Soviets were leading in controlled thermonuclear fusion, space technology and laser applications. They lagged in computer technology, ocean exploitation equipment, and systems for automation of scientific experiments. Fields of planned scientific endeavor were to be energetics (especially direct conversion of thermal and nuclear energy into electrical energy), superconductivity, and the use of atomic energy for heat sources in metallurgical and chemical processes.²²

An authority on Soviet technology cited a study conducted earlier and expanded the list of areas where the Soviets believed they were superior to or equal to the West to include aircraft and military equipment, blast furnaces, rolling mills, and welding equipment. Acknowledged lags were in some chemical, electronic, and construction equipment and materials.²³ A department head at the academy designated magneto-hydrodynamics sources of energy as an area of leadership. He included chemically based materials, biology, and original methods used for planning and management of the national economy.²⁴

In his speech to the ceremonial meeting of the party's Central Committee, the U.S.S.R. Supreme Soviet, and the Russian Supreme Soviet, Brezhnev said that science and technology were expected to solve major problems: new sources of energy, substitutes for many types of natural resources, the technical reequipment of the national economy to reduce manual labor to a minimum, the promotion of the upswing in agriculture, and the struggle against disease and efforts to prolong human life.²⁵

According to a Gosplan official, research has focused on nuclear physics, solid state physics, quantum electronics and optics, problems of control and automation, molecular biology and genetics, problems of environmental protection, and the efficient use of natural resources. The ensuing technology is expected to result in electric cars, new makes of diesel engines, electric engines, new pipeline and container transportation, air cushion and magnetic suspension transportation, magnetohydrodynamic generators, fast neutron reactors, solar and wind power plants, and equipment for ultrahigh-voltage power lines. New materials anticipated are radiation-polymerized steels for electrical machine building, ultrapure substances,

new superconductors, and highly efficient lubricants. New techniques will include platings by plasma surfacing, catalytic production of polymers, and the biothermic processing of household wastes.²⁶

These varied shopping lists all have a major concern—the need for high energy sources, an important ingredient in advanced technology. The level of energy per industrial worker is 50-60 percent lower in the Soviet Union than in the United States.²⁷ Mechanization and automation, including computerization to save labor, are commonly voiced needs. Soviet leaders hope to make large strides in these areas during the tenth five year plan. However, it is probable that these concerns will be just as important in the eleventh five year plan. An adequate supply of energy and automation devices is the key to use in labor productivity. The party and government have enlisted large numbers of scientific personnel and have committed vast resources to the solution of these problems. They have a good chance to succeed in nonconventional energy supply research, but the picture is far from rosy for advanced automation. The areas of energy and automation make an interesting contrast. Electric power was Lenin's favorite research and development subject, and was thus pushed. Today, computers have very high-level political advocates. Therefore, programs for energy and automation are being planned and results evaluated by a small group of bureaucrats who share top-level management slots, prompted by the party leaders.

Undoubtedly, the more conventional approaches to the energy problem—reequipping the petroleum and gas industries for free-flow recovery, new types of deep-well pumps, and other applied technologies in power generation and supply—will attract many research and development specialists. But a closer look at less conventional energy sources and distribution provides clues to future development. At present less conventional sources include: magnetohydrodynamic conversion of heat into electricity, including super-

conducting magnetic systems; atomic energy; and ultrahigh-voltage alternating current lines.²⁸

Magnetohydrodynamic (MHD) conversion is a very efficient way to produce electricity. The Soviet Union is pursuing the development of coal-fired MHD plants, which will come into being beginning in 1990, according to a paper coauthored by D.G. Zhimerin and presented at the World Electrotechnical Congress held in Moscow in June, 1977. Another important aspect of MHD is the application of superconducting magnetic systems. This research began in the early 1960's in the Soviet Union, according to A. Ye. Sheyndlin, a leading researcher.²⁹ Despite the long span of native research, Soviet leaders have sought the use of a United States superconducting magnet from the Argonne Laboratories for this application.

Soviet leaders are proud of the fact that they supported nuclear physics even during World War II when it was purely fundamental research. Apparently, after 1930, Soviet leaders had some glimmering of its possibilities and thus pursued it during the war. The connection of atomic power research to weaponry will not be discussed here.

During the ninth five year plan, electric power was to increase by 40 percent; atomic power by 600 percent. Another 400 percent growth for atomic power is expected at the end of the tenth five year plan.³⁰ Much of the growth will come from the atomic power machinery complex, Atomash, begun in 1977, and covering ground equal to 15 soccer fields adjacent to a man-made lake in the vicinity of Rostov. Its products will equip fast-neutron reactors. By the end of 1977, there were ten atomic power stations in operation in the Soviet Union, and two more were to go into service by the end of the five year plan. During that period, at least three more will be started. The growth rate is set at ten million kilowatts per year.³¹

Nuclear thermionic power systems that convert the heat power released in the nuclear fuel fission process are of great interest to Soviet researchers. Transportable systems that can be used as a thermionic topping cycle in the usual heat power plants with steam turbine units were reported at the World Electrotechnical Congress in 1977.

Along with ultrahigh voltage, alternating current lines, Soviet scientists are pursuing the concept of a

(Continued on page 131)

²⁶K. Yefimov, "Technical Progress and Production Intensification," *Planovoye Khozyaystvo*, no. 7, July, 1977, pp. 32-44, translation in JPRS 69,670.

²⁷V.M. Kudrov, "Some Questions of the Economic Competition between the USSR and the USA," *SShA: Ekonomika, Politika, Ideologiya*, no. 9, 1975, translation in *Soviet Review*, vol. 17, no. 3, pp. 3-29.

²⁸Amann, *op. cit.*, has a very good discussion of the latter on pp. 142, 220-224, which summarizes numerous previous studies. For a brief history by a Gosplan official, see K. Yefimov, *op. cit.*

²⁹A. Ye. Sheyndlin, "Energy Problems Researched at the Institute of High Temperatures," *Nedelya*, no. 19, May, 1977, p. 19.

³⁰V. Shilov, "Light From the Atom," *Pravda*, August 4 and 6, 1977, p. 2, translation in *CDSR*, vol. 29, no. 31 (August 31, 1977).

³¹"Development of Atomic Energy," editorial, *Pravda*, May 11, 1978, p. 1.

Jeanne P. Taylor is a consultive policy scientist doing contract research, specializing in the analysis of science and technology policies and programs throughout the world. With John P. Young, she coauthored "Science and Technology Policy in the U.S.S.R.: Impact of the Changing Character of Soviet Science and Technology on Its Administration," in *Science and Technology Policy: Perspectives and Developments* (Lexington, Mass.: Lexington Books, 1977).

"Although we have no independent measure of consumer expectations in the Soviet Union, many observers would probably agree that in recent years they have outstripped the rate of growth in consumer goods. Thus it may be difficult for Soviet planners to adhere to a model that places primary emphasis on the growth of heavy industry."

The Soviet Economy

BY ROBERT C. STUART

Professor of Economics, Douglass College, Rutgers University

THE performance of the Soviet economic system has long been of interest to Western observers for traditional reasons. Economists and others have been interested in the growth pattern of the first socialist planned economy and the obvious implications of this experience for economic development, international trade patterns, defense postures and so on. In the 1970's, however, this interest in the Soviet economy has been heightened by the emergence of factors relatively new to the Soviet scene, for example, the energy crisis, balance of payments problems and the changing economic implications of détente.

In short, the 1970's have been years of substantial disruption for economic systems around the world. Planned socialist systems are clearly not immune to such problems. To assess this period in Soviet economic history and to forecast the immediate future, an appreciation of new and changing circumstances is essential.

The story of Soviet economic growth and development is by now fairly well known,¹ and substantial agreement on the following outline would probably prevail.

Over the years, Soviet leaders have concentrated on a single-minded strategy of rapid economic develop-

ment. This strategy has included the utilization of a relatively centralized political and economic system to marshal and to use resources (land, labor and capital) at high rates of participation channeled into growth-producing activities.

To be more specific, the rate of growth consumption, in real terms, was held back to facilitate investment in the national economy at rates high by international standards. At the same time, moral and material pressure was utilized to bring labor into the production process, and agricultural land usage was expanded to make the most use of available resources. Such is the nature of extensive economic development, typical of the early years of the Soviet and, indeed, many other developmental efforts. In this sense, the Soviet approach to economic development has been traditional.

Measured simply in terms of the growth of output of the national economy, the Soviet record has been impressive, placing it in the company of a limited number of economic systems around the world.² However, in recent years, the rate of growth of output in the Soviet Union has slowed considerably. Even though one might expect such a slowdown at advancing levels of economic development, the slowdown has nevertheless caught the attention of many observers, notably Soviet planners themselves.³ Many explanations have been put forth to explain the observed facts.

The most prominent explanation centers on a perception that the Soviet economy has been ineffective in generating essential increases in productivity.⁴ Thus the transition from extensive growth (where output increases are generated primarily from input increases) to intensive growth (where output increases are generated primarily from the better utilization of inputs) has been a difficult one for the Soviet system. Although this picture is to some degree a simplification of a very complex process, nevertheless, our experience with the development process tells us that as the growth in the volume of available inputs

¹For a survey, see Paul R. Gregory and Robert C. Stuart, *Soviet Economic Structure and Performance* (New York: Harper and Row, 1974).

²See for example Gregory and Stuart, *op. cit.*, Chapter 10; Stanley H. Cohn, "The Soviet Path of Economic Growth: A Comparative Analysis," *Review of Income and Wealth*, series 22, no. 1 (March, 1976), pp. 49-59.

³For a useful statistical analysis of world development experience, see Hollis Chenery and Moises Syrquin, *Patterns of Development, 1950-1970* (London: Oxford University Press, 1975).

⁴See for example, Abram Bergson, *Planning and Productivity under Soviet Socialism* (New York: Columbia University Press, 1968); Abram Bergson, *Productivity and the Social System—The USSR and the West* (Cambridge: Harvard University Press, 1978).

TABLE 1: Soviet Economic Performance: Growth*

(average annual percentage rates of change)

Indicator	1951-55	1956-60	1961-65	1966-70	1971-75
Gross National Product	5.8	5.8	4.9	5.3	3.7
Industry	10.3	8.9	6.6	6.2	5.9
Agriculture	4.1	4.1	2.4	4.2	-2.0

*Estimates are in terms of Western definitions excluding weapons and measured at factor cost.

Source: Rush V. Greenslade, "The Real Gross National Product of the U.S.S.R., 1950-1975," in United States Congress, Joint Economic Committee, *Soviet Economy in a New Perspective* (Washington, D.C.: U.S. Government Printing Office, 1976), p. 272.

slackens, the only alternative to sustained high rates of growth of output is productivity growth.

In presenting this brief summary of Soviet growth strategy, it remains to examine the record. In particular, it is necessary to look at the availability of inputs and to understand why future growth may be inhibited by limitations in the supply of these inputs.

SOVIET ECONOMIC PERFORMANCE

The recent slowdown in the growth of output in the Soviet Union can be observed in both the official Soviet data and in Western computations.⁵ For example, national income produced (Soviet official data) grew at an average annual rate of approximately 9.9 percent during the 1960's, slowing to an average annual rate of 6.4 percent from 1970 through 1975.⁶ Gross national product (Western definition) grew at an average annual rate of 5.5 percent from 1966 through 1970, slowing to an average annual rate of 3.8 percent for the period 1971 through 1975 (see Table 1).

As a backdrop to this observed slowdown, and most notably as a factor crucial to the immediate future of the Soviet economy, consider the data assembled in

⁵The reader is encouraged to examine the discussions of methodology in the original sources cited. For a general survey of the issues, see Vladimir G. Greml and John P. Hardt, eds., *Soviet Economic Statistics* (Durham, N.C.: Duke University Press, 1972).

⁶From *Narodnoe Khoziaistvo SSSR v 1975g* (Moskva: Statistika, 1976), p. 49.

⁷The existence of negative capital productivity suggests that the capital/output ratio has been rising over time. The existence of this phenomenon over long periods of time is unusual and signifies lack of effective utilization of capital.

⁸These demographic projections are from Murray Feshbach and Stephen Rapawy, "Soviet Population and Manpower Trends and Policies," in United States Congress, Joint Economic Committee, *Soviet Economy in a New Perspective* (Washington, D.C.: U.S. Government Printing Office, 1976), p. 133.

⁹Note that these productivity data are aggregates. Redistribution of capital inputs from one sector to another might be effective.

¹⁰Rush V. Greenslade, "The Real Gross National Product of the U.S.S.R., 1950-1975," in United States Congress, *op. cit.*, p. 227.

Table 2. First, notice that since the 1950's, output has been growing at about 5 percent annually, while inputs have been growing 4 percent annually. The difference, an annual productivity growth of around 1 percent, is modest. Indeed for the period 1971-1975, output grew by less than the growth in available inputs. Second, notice a reasonably stable rate of growth of total input but with the substitution of labor for capital and land. Finally, and most important, notice declines in the average annual rate of growth of productivity (with the possible exception of land) and negative capital productivity.⁷

These numbers help us to understand the past implementation of a perfectly rational extensive development strategy. But what about the future? The problem facing Soviet planners in the late 1970's and into the 1980's is the following: past output increases have come from expansion of the supply of inputs to the production process. However, available projections indicate that such input expansion will not be possible in the near future. What is the basis of such projections?

We have already noted that labor force participation rates are very high (generally over 90 percent of the able-bodied population) in the Soviet Union. This means that there are few persons not now participating who could be recruited for the labor force. Furthermore, the able-bodied population from which the labor force is drawn is projected to grow at an average annual rate of .4 percent for the period 1980-1985 as opposed to its growth rate of 1.9 percent for the period 1971-1975.⁸ If these demographic projections are realized, it will be difficult to achieve any significant increase in the size of the labor force, though some redistribution from agricultural to non-agricultural activity, for example, may still be possible.

The nature of Soviet capital productivity suggests that the expansion of the capital input would not be a successful growth producing activity.⁹ But even if it were, such expansion would be difficult in the Soviet case. Since 1950, when the share of gross national product (Western definition) devoted to fixed investment was 14.8 percent, there has been a steady increase, to 28.4 percent in 1974.¹⁰ The increasing

TABLE 2: Soviet Economic Performance: Productivity

(average annual percentage rates of change)

Indicator	1951-55	1956-60	1961-65	1966-70	1971-75
Gross National Product ¹	6.0	5.8	5.0	5.5	3.8
Inputs					
Labor, capital, land ²	4.5	3.9	4.1	3.9	4.1
labor (man-hours)	1.9	.6	1.6	2.0	1.9
capital	9.0	9.8	8.7	7.5	7.9
land	4.0	1.3	.6	— .3	.9
Factor Productivity					
Labor, capital, land	1.4	1.8	.9	1.5	— .2
labor (man-hours)	4.6	5.1	3.4	3.4	1.8
capital	—2.7	—3.6	—3.3	—1.9	—3.8
land	1.9	4.4	4.4	5.8	2.9

¹Estimates are adjusted to Western definitions including weapons and measured at factor cost.

²Inputs combined using a linear homogeneous Cobb-Douglas production with weights of 60.2 percent, 36.7 percent and 3.1 percent for labor, capital and land respectively.

Source: Rush V. Greenslade, "The Real Gross National Product of the U.S.S.R., 1950-1975," in United States Congress, Joint Economic Committee, *Soviet Economy in a New Perspective* (Washington, D.C.: U.S. Government Printing Office, 1976), p. 279.

diversion of output to reinvestment at the expense of current consumption has obvious negative implications in a society whose population is restive for substantial improvement in consumption patterns.

Finally, growth of the land input has diminished in recent years for understandable reasons. It is well known that in spite of a large Soviet land mass, that portion readily and successfully usable for agricultural production (that is, without substantial accompanying capital) is severely limited. In this sense, the geographic factor is a real constraint.

The evidence suggests that in the immediate future Soviet economic growth will be constrained by the fact that the system is not one in which productivity change is a major growth producing agent. Further, in the absence of substantial productivity improvement, growth in the supply of traditional inputs does not seem to be a viable alternative for generating output increases. Naturally, these generalizations rest upon the accuracy of the underlying analyses and projections. The constraints under which the system operates can change. However, the forces underlying productivity growth are complex; rapid productivity growth is not a simple policy alternative that planners can decree.

Beyond the basic forces molding Soviet economic performances, however, a number of factors dominate the economic scene of the 1970's in both capitalist and socialist nations.

First, the overall performance of the Soviet economy has always been influenced by the performance of the agricultural sector.¹¹ While the overall growth of agricultural output has been good, nevertheless the fluctuations have been severe (see Table 2). For example, in recent years in the face of climatic reverses grain output has fluctuated from approximately 140 million metric tons (1975-1976) to 224 million metric tons (1976-1977). However, the Brezhnev regime has shown a continuing and strong commitment to agricultural modernization, especially through the expansion of capital investment for land reclamation, irrigation and so on. Recent Soviet agricultural performance is summarized in Table 3.

A second important feature of the 1970's has been the changing role of the Soviet Union in the international economy. It has been argued that the importation of advanced technology from the developed West could be a major source of productivity growth for the Soviet economy. The growth of Soviet foreign trade has been rapid in recent years. Between 1970 and 1975, for example, Soviet trade turnover more than doubled from 22.1 billion to 50.7 billion rubles (see Table 4). In the same period, the proportion of total Soviet foreign trade with the West increased from just over 21 percent to just over 31 percent, accompanied by a reduction in trade with socialist countries.¹² Moreover, hard currency trade has increased rapidly, with the growth of hard currency imports generally outstripping the growth of hard currency exports, the result being a substantial hard currency trade deficit¹³

¹¹For a survey of Soviet agricultural development, see David M. Schoonover, "Soviet Agricultural Policies from Development to Maturity," *Soviet Union*, vol. 4, part 2 (1977), pp. 271-96.

¹²Jack Brougher, "U.S.S.R. Foreign Trade: A Greater Role for Trade with the West," in United States Congress, *op. cit.*, p. 693.

¹³The deficit amounted to 7.5 billion in U.S. dollars by the end of 1975. See John Farrell and Paul Ericson, "Soviet Trade and Payments with the West," in United States Congress, *op. cit.*, p. 732.

TABLE 3: Soviet Agricultural Production: Selected Indicators

(average annual output in millions of metric tons)

Product	1961-65	1966-70	1971-75	1976-77	1976-80
Grain	130.3	167.6	181.6	209.6	215-220
Potatoes	81.6	94.8	89.8	84.2	102
Vegetables	16.9	19.5	23.0	24.0	28.1
Cotton	5.0	6.1	7.7	8.5	8.5
Sugar Beets (for processing)	59.2	81.1	76.0	96.6	95-98
Meat (slaughter wt.)	9.3	11.6	14.0	14.2	15-15.6
Milk	64.7	80.6	87.4	92.2	94-96
Eggs (billions)	28.7	35.8	51.4	58.6	58-61
Wool (thousands of tons)	362	398	442	447	473

Sources: Data for the years 1961 through 1977 from *Narodnoe Khoziaistvo SSSR v 1975g* (Moskva: Statistika, 1976), p. 311; United States Department of Agriculture, *USSR Agricultural Situation: Review of 1977 and Outlook for 1978* (Washington, D.C.: U.S.D.A., April, 1978), pp. 30-31. Data for 1976-80 from David W. Carey, "Soviet Agriculture: Recent Performance and Future Plans," in United States Congress, Joint Economic Committee, *Soviet Economy in a New Perspective* (Washington, D.C.: U.S. Government Printing Office, 1967), p. 580.

TABLE 4: Soviet Foreign Trade: Selected Indicators
(1970-1977)

Indicator	1970	1971	1972	1973	1974	1975	1976	1977
(billions of rubles)								
Total exports	11.5	12.4	12.7	15.8	20.7	24.0	28.0	33.3
Total imports	10.6	11.2	13.3	15.5	18.8	26.7	28.7	30.0
Turnover	22.1	23.7	26.0	31.3	39.6	50.7	56.8	63.4
(millions of U.S. dollars)								
Hard currency exports	2,197	2,652	2,815	4,818	7,630	7,800	n.a.	n.a.
Hard currency imports	2,711	2,955	4,171	6,566	8,541	14,081	n.a.	n.a.
Balance	-514	-303	-1,356	-1,748	-911	6,281	n.a.	n.a.

Sources: Jack Brougner, "U.S.S.R. Foreign Trade: A Greater Role for Trade with the West," in United States Congress, Joint Economic Committee, *Soviet Economy in a New Perspective* (Washington, D.C.: U.S. Government Printing Office, 1976), p. 693; John Farrell and Paul Ericson, "Soviet Trade and Payments with the West," in United States Congress, *op. cit.*, p. 728; Moscow Narodny Bank Limited, *Press Bulletin*, no. 854 (April 5, 1978), p. 15.

with the West. This deficit has been financed largely with long-term credits, and results from growth in Soviet imports of machinery and equipment and agricultural commodities, and the price increases of these products in Western markets. Since the early 1970's, in contrast to earlier years, the Soviet Union has been a net importer of grain as domestic harvest fluctuations and pressure for dietary improvement operated simultaneously. In projecting these trends into the late 1970's and early 1980's, much will depend upon the stability of Soviet agricultural performance, Soviet political priorities and the ability of Soviet planners to expand Soviet exports, especially hard currency exports.

A third and important new development of the

1970's is the onset of the energy crisis. A country with vast natural wealth, like the Soviet Union, would usually be immune from the fluctuations of world petroleum markets. In spite of substantial reserves, however, the Soviet Union, like other countries, has tended to exploit first those reserves most readily accessible. New exploration and exploitation, now in progress, will cost significantly more for extraction

(Continued on page 126)

Robert C. Stuart is the author, with Paul R. Gregory, of *Soviet Economic Structure and Performance* (New York: Harper and Row, 1974); he has also written extensively on Soviet agriculture, and most recently on Soviet migration patterns.

"Leaving the Soviet Union to cope [with its African problems] is the wisest course the United States can follow; the difficulties that the U.S.S.R. has encountered . . . as a result of its involvement in African affairs are substantial and can be expected to grow"

Soviet Policy in the Middle East and Africa

BY O. M. SMOLANSKY

Professor of International Relations, Lehigh University

In the fall of 1977, the United States continued its efforts to convene the Geneva conference on the Middle East before the end of that year. President Jimmy Carter's new administration reassessed the situation and established personal contacts with the major participants in the Arab-Israeli conflict during the following year. Thus, in the spring, President Carter met with the leaders of several Arab states and, in July, with Israel's new Prime Minister Menahem Begin. In August, Secretary of State Cyrus Vance toured the Middle East. Seen as opportunities to probe the issues and to establish a framework for future initiatives, these initial contacts were tentative and inconclusive.

It was not until October, 1977, that the United States took a number of concrete steps to bring its plans to fruition. Unfortunately, however, Washington succeeded not only in making what proved to be contradictory arrangements but also in antagonizing many of the parties to the Arab-Israeli dispute, among them Israel, Egypt, and the Soviet Union.

The initial step was a joint United States-Soviet statement made public on October 1, 1977, which noted that the circumstances prevailing in the Middle East "dictate the necessity of achieving, as soon as possible, a just and lasting peace." To this end, the United States and the Soviet Union, as co-chairmen of the Geneva conference, agreed that its next session should be convened before the end of 1977. Turning to specifics, the superpowers noted the necessity of resolving the Palestinian question, including insuring "the legitimate rights of the Palestinian people," and called for "the withdrawal of Israeli armed forces from territories occupied in . . . 1967." (This meant that the United States, for the first time, subscribed to the Arab-Soviet formula on "the legitimate rights"—rather than "legitimate interests"—of the Palestinians, whereas the U.S.S.R. abandoned its insistence on Israeli evacuation of *all* the territories captured in 1967.)

While some of the wording may have been unfortunate, including the determination to adhere to an artificial timetable, it appears in retrospect that the joint declaration was a wise and measured step. It reflected an awareness on the part of American decision-makers that lasting peace in the Middle East would be difficult, perhaps impossible, to achieve without Moscow's cooperation.

This conclusion is based on the assumption that a peace that would completely satisfy all the parties directly concerned is unattainable. For this reason, a series of mutually acceptable compromises, guaranteed by the superpowers, offer the best chance for durable peace. Moreover, achievement of apparently acceptable compromises with an antagonistic superpower waiting in the wings for complications to arise does not promise short- or long-term success. In recognition of this situation, the United States moved to draw the Soviet Union into the peace-making effort by abandoning its emotionally satisfying but politically unrealistic determination to "keep Russia out of the Middle East."

As is typical of the Arab-Israeli conflict, however, in short order emotion once again prevailed over reason. Subjected to groundless accusations of "drawing the Soviet Union into the Middle East" in order to *impose* a superpower solution on the reluctant parties, Washington quickly backed down. As early as October 5, Carter, Vance, and Israeli Foreign Minister Moshe Dayan agreed on the details of a Working Paper which, to all intents and purposes, effectively dismantled the joint statement of October 1. Among other things, Israel was assured that such unacceptable subjects as "ensuring the legitimate rights of the Palestinian people"—one of the planks of the Arab-Soviet position to which Washington had subscribed on October 1—could not be introduced to the Geneva conference's agenda without Jerusalem's approval.

In a period of less than six days, the United States had succeeded in antagonizing both the Soviet Union

and Israel. The Soviet Union was incensed at what it perceived as a breach of the October 1 understanding, while Israel was displeased with the United States for reaching an accord with Moscow at what was perceived to be Israel's expense. Even more seriously, Washington's twin actions succeeded in making impossible the speedy convocation of the Geneva conference—an objective which, by then, had become one of the cornerstones of the Carter administration's Middle East policy. This "feat" was accomplished because, in addition to alienating the Russians and the Israelis, the President's moves were received with hostility in Cairo and contributed to Egyptian President Anwar Sadat's decision to travel to Jerusalem.

SADAT'S INITIATIVE

Dictated by complex military, political and economic considerations, the Egyptian President's visit to Israel was a historic occasion; it represented a major psychological breakthrough in the bitter 30-year history of Arab-Israeli relations. Militarily, Sadat was well aware that Arab ambitions to annihilate Israel or even to force her to return territories lost in 1967 were doomed to fail. Politically, Sadat was annoyed by the fact that major decisions with regard to convening the Geneva conference and fixing its agenda were being made in Washington, Moscow and Jerusalem, and not in Cairo. He was particularly unhappy about the United States-Soviet accord, insisting (along with the Israelis) that the Soviet Union has no constructive role to play in the settlement of the Arab-Israeli dispute. Sadat also resented the fact that Egypt's Arab rivals, above all Syria and the Palestine Liberation Organization (PLO), were being accorded a political status equal to Egypt's and that Israel, as evidenced by the Working Paper, was able to resist United States pressure to compromise with the Arabs. Last but not least, his nation's steadily deteriorating economic situation—in 1977 alone close to 30 percent of Egypt's budget was devoted to national defense—prompted him to seek peace by direct and dramatic means.

By traveling to Jerusalem, Sadat not only re-established Cairo's preeminence in the peace-making process but also nullified Washington's efforts to settle the Arab-Israeli conflict by means of the Geneva conference. Moreover, by forcing the superpowers to choose sides, he skillfully drove a wedge between the United States and the Soviet Union. Given the new situation, the Carter administration was left little choice but to support his initiative. Moscow, for its part, had to side with Cairo's Arab competitors, now loosely organized in the blustering but otherwise unimportant "Front of Steadfastness and Confrontation." To have done otherwise, that is, to have accepted Sadat's invitation to participate in the Egyptian-Israeli negotiations, clearly would not have

gained the Soviet Union any appreciable leverage in either Cairo or Jerusalem and would have totally alienated "pillars" of the Soviet position in the Middle East, including Iraq, Syria, Libya, Algeria, the People's Democratic Republic of Yemen (PDRY), and the Palestine Liberation Organization (PLO).

In short, Sadat's journey to Israel suddenly and dramatically transformed the Middle East situation. Sadat was highly successful in achieving his short-term objectives: torpedoing the Geneva conference while gaining a measure of popular American admiration and support; establishing direct lines of communications with the Israeli leaders; diverting, for the time being, the attention of the average Egyptian from the critical economic situation at home. Yet at the time of this writing, Sadat is no closer to his ultimate goal—peace between the Arab states and Israel on terms acceptable to moderate Arabs—than he was before. He has also earned the hostility of a number of Arab heads of state and of the PLO, who accuse him of breaking a "united Arab front," with nothing to show for his efforts.

What the future holds for Sadat's bold venture and, ultimately, for his own political survival, only time will tell. In the meanwhile, it may not be unreasonable to assume that, in going to Israel, Sadat raised in the minds of many Egyptians expectations that will not ultimately be fulfilled.

Moscow's reaction to the events of October-November, 1977, was predictably negative. It perceived the United States-Israeli Working Paper as a retreat on the part of the United States from the October 1 agreement on joint superpower efforts to settle the Arab-Israeli dispute at the Geneva conference. Soviet propaganda media depicted the document as an American attempt to create dissension among the Arabs in order to force them into bilateral contacts with Israel and as evidence of President Carter's unwillingness to exert pressure on Israel.

Once the Soviet Union had recovered from the shock caused by Sadat's announcement of his willingness to travel to Israel (it took the Kremlin three days to react), Radio Moscow stated, on November 16, that the Egyptian President had betrayed the Palestinian cause. Subsequently, the Soviet Union accused Sadat of dividing the Arabs, conspiring with the United States to isolate the "genuine" representatives of the Arab side as well as the Soviet Union, and deciding to enter into a separate peace with Israel.

In the following months, the Soviet Union embarked on a two-pronged operation designed to isolate Egypt politically (as well as Israel and the United States), and to encourage the resistance of the "Rejection Front" to Sadat's peace initiative. Thus, when talks between Israel and Egypt were suspended in January, 1978, the Soviet media described the event as a "breakdown" and "failure" of a policy that had

been doomed from its very inception. The subsequent stalemate, Moscow concluded, was being used by the United States to make Egypt even more dependent on Washington, a turn of events that boded ill for Cairo's responsibility to the Arab cause.

At the same time, the Kremlin made a concerted effort to support the "rejectionist" attitude of Syria, Libya, Algeria, the PDRY and the PLO. (Iraq refused to join the "Front" because, in Baghdad's opinion, it should have demanded the outright destruction of Israel.) The Soviets gave their blessing to the two "rejectionist" conferences held in Tripoli, in December, 1977, and in Algiers, in February, 1978. Both produced no tangible results but were used to condemn the Sadat initiative.

Simultaneously, and more significantly, Moscow's backing of the "Rejection Front" was reflected in the widely publicized visits of the Soviet Union by the leaders of Algeria, the PDRY, Libya, Syria and the PLO. In January, 1978, Algerian President Houari Boumedienne arrived in Moscow and was publicly assured of Soviet readiness to support "frontline" Syria and the PLO. (It was simultaneously reported in the West that the Kremlin had stepped up its arms deliveries to Damascus.) Similar assurances, along with promises of increased military and financial aid, were also given to PDRY Prime Minister Ali Nasser Muhammad. Next to arrive, in February, 1978, were Prime Minister Abdul Salam Jallud of Libya and President Hafez al-Assad of Syria. Whereas Libya was reassured of Soviet support in her dealings with Egypt, Tunisia and Chad—Libya's main "problem areas"—Syria was rewarded by the conclusion of a major new arms deal (including some of the latest Soviet aircraft, ground-to-air missiles, and the new T-72 tanks), designed to "reestablish the military-strategic balance" in the Arab-Israeli sector. Stemming from the Syrian (and Soviet) claim that Egypt had abandoned her responsibilities as a "confrontation state," the policy calls for an expansion of Syrian armed forces to compensate both for Sadat's "desertion" and for the maintenance of some 30,000 soldiers as "the Arab peace-keeping force" in Lebanon. The purchase of the new weapons is apparently being financed by Libya.

Finally, in March, 1978, PLO Chairman Yasser Arafat arrived in Moscow and was promised continued Soviet support of "the Palestinian people" and of their "legitimate national rights." As the "sole legitimate representative" of the Palestinians, the PLO was also assured of Moscow's backing in its quest for participation in any future peace negotiations on an "equal footing" with all the other parties. The ensuing PLO attack on the Haifa-Tel Aviv coastal road and the Israeli occupation of southern Lebanon did not affect the basic Soviet position.

With the passage of time, the Kremlin's attitude

toward a Middle East settlement has hardened. Thus, in an "interview" with *Pravda*, published on December 24, 1977, President Leonid I. Brezhnev emphasized the constructive features of Moscow's position and expressed himself in favor of a negotiated, comprehensive peace settlement to end the state of war and to assure all parties, including Israel and the PLO, of independence and security. But in a joint Soviet-Syrian communiqué of February 24, 1978, the Soviet Union espoused the "rejectionist" position, calling not only for a "comprehensive settlement" and the establishment of an independent Palestinian state with or without a peace accord (or, for that matter, even a peace conference) but also for "the right of Palestinian refugees to return to their homes [in Israel]."

Otherwise, however, the Kremlin took no drastic action in the Middle East. Its relative restraint was dictated by its unwillingness to add fuel to a potentially explosive situation at a time when world attention was shifting from the Arab-Israeli sector to the continent of Africa.

AFRICA

By late autumn of 1977, it became apparent that Somali efforts to wrest control of the barren Ogaden region from Addis Ababa control had been frustrated by Ethiopian and Cuban troops equipped with Soviet weapons. Somalia's dismay with what she regarded as Moscow's duplicity led, in November, 1977, to a unilateral abrogation of her Friendship Treaty with the U.S.S.R., the expulsion of most Soviet personnel, and the closing of Soviet port and missile installations at Berbera. (The latter were used to service Russian naval units operating in the Indian Ocean.) If Somalia's President Muhammad Siad Barre had expected extensive Western political and military support in his war against Ethiopia as a reward for his bold action, he must have been bitterly disappointed. None was forthcoming. While limited supplies of arms and ammunition were flowing from a number of Arab states (including such Soviet clients as Iraq and Syria) as well as from Iran and Pakistan, they proved no match for the extensive deployment in Ethiopia of Soviet weapons and Cuban military personnel. After his forces were routed on the battlefield in the spring of 1978, Siad had to order their recall from Ogaden.

In this connection, however, especially in the light of recent developments in Rhodesia and Zaire, it is often overlooked, that in the Horn of Africa the Soviet Union has suffered one of its most serious political setbacks of the post-1955 period. Many observers forget that Moscow labored long and hard to prevent the crisis between Ethiopia and Somalia from erupting into open warfare. When an opportunity to establish a Soviet presence in Addis Ababa presented itself in 1976-1977, the Kremlin jumped at it in the ap-

parent belief that public adherence by the Ethiopian and Somali leaders to "Marxism-Leninism" represented a sufficiently solid basis on which to contain and ultimately resolve that ancient rivalry. With this in mind, Communist luminaries like Soviet President Nikolai Podgorny and Cuban Premier Fidel Castro toured the area in the spring of 1977, advocating the formation of a radical, Marxist-oriented, southern Red Sea bloc, to consist of Ethiopia, Somalia, Eritrea, the PDRY and, possibly, Jibuti. It was obvious that the establishment of such a pro-Soviet entity would have marked a major political victory for the Soviet Union. However, the Kremlin's plans were dashed by the ensuing Somali-Ethiopian war; and Moscow also lost all of its positions in Somalia.

Moreover, having been evicted from the once "staunchly Marxist-Leninist" Mogadishu, the Soviet Union is now saddled with the major responsibility for the survival of "Marxist-Leninist" Ethiopia, a country plagued by political instability and a rapidly deteriorating economy. Addis Ababa is also facing a major unresolved problem in Eritrea, where local nationalists, split among several competing groups, are in control of most of the region and appear united in their insistence on the province's independence from Ethiopia.

In the past, both the Soviet Union and Cuba had backed the Eritrean claim to independence and supported the Eritrean Popular Liberation Front (EPLF) which has a strong Tigre, non-Muslim, and Marxist component. The majority of the Arab states, in contrast, have backed the predominantly Muslim Eritrean Liberation Front (ELF). Saudi Arabia, Egypt, and Sudan, in particular, have enlisted some Western support for a plan to turn the Red Sea into an Arab-dominated waterway, with an independent Eritrea completing the shoreline, as a counter to Soviet and radical influence in the area. The confrontation between Ethiopia and the Eritrean nationalists has placed the U.S.S.R. on the horns of a dilemma. Unless some mutually acceptable compromise can be worked out, Moscow may return to backing the EPLF, thus totally alienating Addis Ababa's current leader, Colonel Mengistu Haile Mariam. Or it could turn its back on its erstwhile "Marxist-Leninist" clients (as the Russians did in Somalia) and help the Ethiopians suppress the Eritreans, who are also supported by the majority of the Arab states.

Should the Kremlin choose the second alternative, it could be bogged down in a protracted guerrilla war reminiscent of the United States experience in Vietnam. Siding with Addis Ababa might also create new tensions between Moscow and Havana. The latter, in February, 1978, renounced any intention of helping Ethiopia in the Eritrean campaign. How this problem will ultimately be resolved remains to be seen. In the meantime, whatever the turn of events in Eritrea, the

Kremlin can apparently expect only serious trouble.

Assistance in winning the Ogaden war, securing the political survival of Mengistu's military dictatorship, and preventing economic collapse in Ethiopia have required a large infusion of Russian weapons, Cuban personnel and, one may assume, Soviet economic aid as well. Much more will be required before the situation in Ethiopia is stabilized so that its government can provide for the country's basic needs. One may wonder whether the Soviet Union anticipated the extent of its involvement and of the outlay of resources when it first embarked on its Ethiopian adventure.

As for the future, even if the Kremlin continued to back Addis Ababa exclusively and even if the latter were to score a decisive victory in its conflict with the Eritrean nationalists, there is no guarantee that a large infusion of Soviet arms and other forms of aid would render "Marxist-Leninist" Mengistu any more amenable to Moscow's wishes in the long run than was his "fellow Marxist-Leninist," Siad Barre of Somalia.

In a very important way, the nature of the Soviet commitment to Ethiopia dwarfs the serious problems that the Soviet Union has encountered in its efforts to back the Angolan regime of Agostinho Neto against the anti-government forces controlling portions of Angola's countryside. Whereas Angola is able to subsidize her military operations from the proceeds of the sale of Cabinda oil, Ethiopia, with her economy in shambles, has no such major source of income. Ethiopia has thus become a classic impoverished and disorganized client, which must be kept afloat by massive infusions of Soviet resources.

In the light of these considerations, it is regrettable that President Carter's pre-election assurances of cool and measured United States responses to Moscow's African "adventures" have occasionally given way to public alarm over the alleged establishment of a Soviet-Cuban "condominium" over portions of the African continent. More specifically, some officials in the Carter administration have "elevated" Africa as a major testing ground of Soviet intentions and, even more incredibly, of the President's ability to exert strong leadership in foreign as well as domestic affairs.

Equally unfortunate and ultimately misleading is the lumping together of such unrelated issues as the conflicts in the Horn of Zaire and the racial supremacy struggles in Rhodesia, Namibia and South Africa. To justify the perpetuation of white minority rule over

(Continued on page 127)

O. M. Smolansky is the author of a recently published book, *The Soviet Union and the Arab East Under Khrushchev* (Lewisburg: Bucknell University Press, 1974). He has written extensively on Soviet foreign policy and the international relations of the Middle East.

"... it is hard to refrain from suggesting that the word 'détente' be dropped from official descriptions of United States-Soviet relations until the Soviet Union curbs its relentlessly competitive impulses and begins to play a more constructive and responsible international role."

Soviet-American Relations: Notes on Détente

BY JEREMY R. AZRAEL

Professor of Political Science, University of Chicago

WITH varying shades of emphasis and degrees of confidence, early Western protagonists of détente contended that it would further four goals. In the first place, it would restrain the scale and tempo of the Soviet strategic arms buildup and persuade the Kremlin that the American strategic doctrine of mutual assured destruction (MAD) provided more rational criteria for strategic programming than the inherently destabilizing war-fighting doctrine of the Soviet general staff. In the second place, it would lead to a reduction in the Soviet military threat to West Europe and Yugoslavia and to a general deescalation of tensions between the North Atlantic Treaty Organization and the members of the Warsaw Pact. In the third place, it would foster less militant Soviet behavior in the "third world" and elicit greater Soviet cooperation in the management and peaceful solution of "third-world" conflicts. Finally, it would encourage an opening of Soviet society to outside influences and would reinforce tendencies toward political liberalization and democratization.

If one measures the success or failure of détente by these goals, it is hard to avoid a negative judgment. In the strategic realm, for example, the Soviet Union has not only continued to procure and deploy intercontinental and submarine-launched ballistic missiles at near-maximum tempos but has proved willing to exploit every loophole and ambiguity in the SALT I agreement to upgrade and modernize its arsenal. Far from accepting the principles of mutual assured destruction, moreover, the Soviet Union has continued to deploy large numbers of "heavy" missiles with throw weights and warhead accuracies which leave little doubt that they are intended to be first strike or counterforce weapons—i.e., weapons designed to destroy American missiles in a surprise or preemptive attack. Furthermore, it has maintained an active research and development program in the field of anti-ballistic missiles (ABM) and has "compensated" for its compliance with the terms of the United States-Soviet ABM treaty by greatly accelerating and expan-

ding its program of passive civil defense. Although the current magnitude and potential efficacy of the civil defense program are subject to debate, there is no doubt that it represents a serious commitment to the protection of industrial and urban population targets against a United States second strike—i.e., against the very capability on which the United States depends for deterrence.

In the European theater, the past few years have failed to bring a cutback in Warsaw Pact forces; on the contrary, they have brought a substantial buildup and reequipment of those forces and a marked increase in their offensive capabilities. Although the urgent need to expand its forces along the Sino-Soviet frontier gave the Kremlin a strong incentive to transfer some of its own units out of East Europe, Sino-Soviet tensions did not induce Soviet leaders to expedite the force reduction negotiations in Vienna or to show the least interest in a phased and balanced withdrawal of United States and Soviet forces. Any Soviet units that were shifted eastward were promptly replaced, and units on the "western front" have continued to receive the bulk of a steady and massive outpouring of new tanks, armored personnel carriers, self-propelled artillery pieces and tactical aircraft, as well as the bulk of a rapidly growing supply of SS-20's, which are mobile intermediate range missiles without any Western counterparts. While flexing its military muscles, moreover, the Soviet Union has exerted increasing diplomatic pressure on Norway, Austria and Yugoslavia; has endorsed an attempted seizure of power by the Communist party of Portugal; has encouraged an Arab oil embargo of Western consumers; and has periodically violated a variety of East-West agreements on Berlin. If few of these undertakings have had the ferocity of their cold war counterparts, they are nonetheless reminiscent of the cold war and of the actions undertaken by the Soviet Union during the interval between the end of the cold war and the advent of détente.

If Soviet policy in Europe has remained qualitatively unchanged during the past decade, Soviet

policy in the "third world" has clearly become more militant and "adventuristic." Despite the then United States Secretary of State Henry Kissinger's assertion to the contrary, for example, it seems reasonably clear that the Kremlin was prepared to run much higher risks in the Mideast war of 1973 than it had been willing to run in 1967, when none of its pilots flew active combat missions and when its efforts to prevent a massive Egyptian defeat stopped short of a high-level alert of Soviet airborne forces.

In the same vein, the Soviet Union's African policy has become steadily more militant, as is attested, among other things, by its decision to transport and support tens of thousands of Cuban proxy troops that have played decisive combat roles in both Angola and Ethiopia-Somalia and have been instrumental in training a variety of African guerrilla movements in the use of growing stockpiles of Soviet-supplied arms. While arming Africa, moreover, the Soviet Union has increased its arms supplies to "third world" allies like Iraq and Libya, both of which, in turn, are major sources of arms for a variety of international terrorist movements.

Finally, all these activities have been accompanied by the establishment of a shifting but growing array of Soviet military bases and facilities in "third world" countries, which have concluded treaties of friendship and mutual assistance with each other and with the countries of the Soviet bloc, as well as with the Soviet Union, and have thereby contributed to the emergence of something akin to a global collective security system through which the Soviet Union can legitimate the exercise of its "neo-imperial" power.

Within the Soviet Union proper, the Kremlin has not only prevented any large-scale "opening" of the country to outside influences as a result of détente but has engaged in a massive and systematic crackdown on dissident activity of every sort. While it has permitted many foreign firms to open offices in Moscow, it has not allowed the representatives of those firms to travel freely or to pursue unofficial contacts with Soviet citizens. Similarly, while it has made it easier for Western journalists to get multiple reentry visas to the Soviet Union, it has shown no compunctions about expelling reporters who displease it or about subjecting the entire foreign press corps to harassment and intimidation.

As for homegrown troublemakers, expulsion, harassment and intimidation have become standard operating procedures and such formerly exceptional measures as psychiatric incarceration, administrative exile, imprisonment and confinement in the Gulag have become more or less routine. By Stalinist standards, of course, even these practices are relatively liberal and benign. In comparison with the "thaw" of the Nikita Khrushchev era, however, the prevailing climate of Soviet political and cultural life has taken

an unmistakable turn for the worse.

According to a number of United States commentators, a significant share of the blame for the generally unexpected and disappointing outcome of détente can be attributed to a lack of generosity and forbearance in American approaches to the Soviet Union. Thus, it is alleged that the adoption of the amendments sponsored by Henry Jackson (D., Wash.) and Charles Vanik (D., Ohio) and by Adlai E. Stevenson (D., Ill.) deprived the Kremlin of any realistic prospect of securing the large-scale technology transfers and developmental credits on which its putative willingness to comply with United States expectations was predicated. In addition, it is alleged that the "human rights offensive" launched by President Jimmy Carter's administration represented an unwarranted United States decision to treat every incident of dissent in the U.S.S.R. as a propaganda windfall that could and would be utilized to embarrass the Kremlin and expose it to international censure. However, even if one grants the partial validity of these charges, they are clearly overstated and cannot sustain the suggested general indictment.

However inadvisable President Carter's human rights campaign was, there can be no doubt that it postdates the inauguration of the Kremlin's increased repression of Soviet dissidents, which began shortly after Khrushchev's ouster and reached wholesale proportions by the early 1970's. Whatever its initial impact, moreover, the Carter campaign peaked quickly in response to Kremlin protests and had become almost inaudible by the time of the Belgrade Conference. If anything, therefore, the Kremlin is likely to have concluded not only that the United States was unprepared to engage in aggressive ideological competition that the Soviet Union pretended to welcome but that the U.S. was not even prepared to make a serious diplomatic issue of patent Soviet violations of the "basket three" provisions of the recently concluded Helsinki Final Act.

In the case of the Jackson-Vanik and Stevenson amendments, there is no doubt that the Kremlin felt betrayed. Nevertheless, it was also aware that most-favored-nation status was of largely symbolic value to the Soviet Union and that the White House remained ready and eager to "compensate" for its inability to offer government-guaranteed credits by facilitating a rapid acceleration of United States-Soviet economic relations. Before long, moreover, the Kremlin probably realized that there were definite limits to the amount of credit it could safely accept and understood that it might be preferable to tap European and Japanese instead of American sources. In any event, the amendments in question did not prevent the United States government from approving an unprecedented array of technical and technological transfers or from authorizing Soviet wheat purchases

that may well have been essential to Leonid Brezhnev's survival in power. Whatever its frustrated economic aspiration, therefore, the Kremlin could hardly conclude that the United States had reneged on all its economic promises or that the Soviet Union had nothing important to gain from a continuation of United States-Soviet trade.

UNITED STATES POLICY

If these points indicate that United States policy was more generous and forbearing than some critics contend, there are other indications that the United States actually went well beyond the call of duty—and perhaps the call of prudence. Without going into any detail, one can cite its ratification of a SALT I treaty that ceded the Soviet Union a quantitative advantage in strategic weapons and of an ABM treaty that gave up what was almost certainly a United States operational advantage; its refusal to insist that a SALT II agreement provide for a cutback in the number of Soviet heavy missiles; its decisions against the prompt procurement of the B-1 bomber and the neutron bomb; its cooperation in satisfying the long-standing desire for an agreement (the Final Act of the Helsinki Conference on European Security and Cooperation) on the inviolability of Europe's postwar boundaries; its revival of the Geneva Conference as the appropriate forum for an authoritative Mideast settlement; and its manifest reluctance to retaliate sharply against such direct and premeditated provocations as the espionage conviction of Soviet dissident Anatoly Shcharansky or the slander conviction of the Moscow correspondents of *The Baltimore Sun* and *The New York Times*. Although the addition of items like Washington's decision to proceed with the procurement and deployment of the cruise missile and its decision to increase inflation-controlled defense spending by three percent per annum would doubtless make this list less one-sided, the "correctives" more nearly exonerate United States policy from charges of appeasement than substantiate charges of excessive intransigence and combativeness.

It would be more consonant with the viewpoint of the architects of détente to argue that a principal reason why the outcome of détente fell so short of expectations is that the United States failed to sanction the Soviet Union economically for its undesirable international and domestic behavior. Ironically, the best case record in support of this argument is the history of the Jackson-Vanik amendment to which President Richard Nixon and his administration were so strongly opposed. Whatever else it demonstrates, this history shows that the Kremlin was prepared to change its domestic modus operandi and to allow a significantly greater rate of Jewish emigration in response to the credible threat (i.e., the threat posed by the Jackson-Vanik amendment) that it would

otherwise be deprived of access to United States markets. Furthermore, any claim that the adoption of the Jackson-Vanik amendment precluded further use of this type of "linkage" founders on the fact that the volume of United States-Soviet trade underwent a rapid subsequent growth and included millions of tons of United States grain that were of great importance to the U.S.S.R. and could not be purchased in other markets. Once United States-Soviet trade had begun in earnest, however, the White House was faced with a situation in which any serious "linkage" efforts aroused the opposition of American interest groups, notably the "farm lobby," which had acquired major stakes in ongoing and expanded sales to the Soviet Union.

Although a determined administration might be willing to overcome opposition to linkage, the probability that any administration would spend large amounts of domestic political capital for intrinsically uncertain international payoffs seems low; and the entire theory of systematic "linkage" begins to acquire a rather academic air. Even if this theory had been tested in practice, it would probably have led only to a temporary and partial suspension of Soviet behavior that the United States considered inimical to its interests. A healthy dose of skepticism on this score is justified by the Kremlin's sustained unresponsiveness to the strong internal economic pressures that were generated and exacerbated by its pursuit of the very policies to which the United States objected. Since even small increments can be decisive, the addition of foreign economic pressures could conceivably have led the Kremlin to change its basic stance. Given available information, however, this does not seem very likely.

What these considerations suggest is that most of the disappointments that the United States has experienced during the course of détente stem from unfounded illusions about the character of the Soviet regime and that there was virtually no action the United States could have taken that would have prevented Soviet leaders from striving for a robust strategic parity, targeting large offensive forces on

(Continued on page 125)

Jeremy R. Azrael is chairman of the Committee on Slavic Area Studies at the University of Chicago, where he has taught since 1961. Between 1975 and 1977, he was a senior social scientist with the Rand Corporation and in 1977-1978, he was the American co-director of the East-West Task Force of the Trilateral Commission. His publications include *Managerial Power and Soviet Politics* (Cambridge: Harvard University Press, 1965), *An Overview of East West Relations* (New York: Trilateral Commission, 1977), *Soviet Nationality Policies and Practices* (New York: Praeger, 1978), and numerous journal articles and essays in scholarly symposia.

Although "the pendulum of the Sino-Soviet confrontation" apparently has been pushed "closer to war," it must be remembered that "there are important constraints on the Soviet Union . . . over and above China's already formidable and growing defensive retaliatory power."

Moscow and Peking Since Mao

BY HAROLD C. HINTON

Professor of Political Science and International Affairs, George Washington University

The death of China's Chairman Mao Tse-tung on September 9, 1976, has so far been less of a turning point in Sino-Soviet relations than might have been expected. On both sides, it is the attitudes of entire elites, not only individual leaders, that matter, and these have been frozen in a mold of mutual hostility since about 1960. Indeed, there have been disturbing recent signs of an increase in tension between Peking and Moscow.

To the extent that there was consensus in Moscow on the probable course of Sino-Soviet relations after Mao's death, it ran roughly as follows. Largely because of Mao's support, the Shanghai radical faction would probably come to power. Since their views were known to be profoundly anti-Soviet, as well as anti-American, the outlook was bleak. At some later date, however, the so-called moderates, including Chou En-lai and his intended successor, Vice Premier Teng Hsiao-p'ing, would probably gain the upper hand, and since their differences with the radicals were presumed to extend to policy toward Moscow, Sino-Soviet relations were then expected to improve.¹

This forecast proved seriously, and predictably, wrong, at least in the short run, and this fact is more important than the reasons for the error. The moderates were far stronger politically and more anti-Soviet than Moscow thought. The period of radical ascendancy was very short and followed the death of Premier Chou En-lai (January 8, 1976) rather than that of Mao; a month after Mao's death, the radicals were forcibly purged, and Peking's anti-Soviet course continued without essential change.

Soviet expectations, although mistaken, were not without some foundation. During Chou's terminal illness, while Teng Hsiao-p'ing was effectively in

charge of foreign affairs, Peking made relatively conciliatory gestures toward Moscow. On November 6, 1974, a message from Peking to Moscow stated that Chou and Soviet Premier Aleksei Kosygin had reached an agreement on September 11, 1969, on a cease-fire and a mutual troop pullback from "disputed areas"; the message appeared to drop Peking's demand for a new boundary treaty. In other respects, however, the Chinese position on the border dispute remained firm.² On December 27, 1975, Peking released, with a virtual apology, three members of a Soviet military helicopter crew who had been held since March, 1974, on charges of espionage.

At least in part, these initiatives were probably intended to startle the United States into paying more attention to Chinese views. In the case of the helicopter crew, Teng may have feared that after Chou's death, the radicals might push successfully for a trial of the three Soviets, which would be provocative to Moscow; he presumably considered that their release could not be justified without stating (not necessarily correctly) that the original charges against them had been in error. There are, nonetheless, no convincing grounds for considering Teng "soft" on the Soviet Union—an important question if only because the commanders of three of the four Military Regions bordering on the Soviet Union and the Mongolian People's Republic have personal ties with Teng.

In any case, Chou's death exposed Teng to the wrath of the radicals. Teng fell from office for the second time in April, 1976, and the premiership, as well as the position as Mao's heir apparent, passed to the relatively unknown Minister of Public Security, Hua Kuo-feng. The upsurge of radical activity that followed apparently included a bomb explosion outside the Soviet embassy on April 29.

As Moscow may or may not have realized at that time, the decline of the Shanghai radicals began in the summer of 1976, even before Mao's death. The main

¹Dieter Heinzig, "New Low in Peking-Moscow Relations," *Aussenpolitik*, no. 3, 1967, pp. 300-309.

²Peking radio broadcast, November 6, 1974.

single cause was apparently their irresponsible behavior at the time of the great North China earthquake of July 28.

Moscow suspended its anti-Chinese polemics and sent polite condolences at the time of Mao's death, apparently hoping for a favorable response. Peking made it clear on September 14, however, that flattery would not be rewarded; Soviet condolences were rejected informally on the ground that there were no formal relations between the Chinese and the Soviet Communist parties. A similar exchange occurred in connection with Hua Kuo-feng's election as Chairman of the Central Committee of the Communist party of China in late October. Peking did not react publicly to the signing on October 19 of a Soviet-Mongolian boundary treaty, whose purpose was probably to suggest that reasonableness on Peking's part might be similarly rewarded.

Moscow was no more successful with the stick than with the carrot. On October 14, an article in the Paris *France-Soir* by Victor Louis (who on occasion has served as a semiofficial spokesman for Moscow's views) said that Peking had only about 30 days to reach an accommodation with the Soviet Union.³ In response to the threats from Moscow, United States Secretary of State Henry Kissinger said the following day that the United States would take a serious view of a Soviet attack on China. In a subsequent article two weeks later, Louis implied that the Soviet Union was backing away from its earlier threat, if that was indeed what it had been.

During the following months, it became increasingly clear from Hua Kuo-feng's public statements that he intended to maintain an anti-Soviet line. In late April, 1977, for example, he visited Manchuria and discussed the Soviet threat to the region at considerable length.

By this time, Moscow had evidently decided that its unnatural moratorium on anti-Chinese propaganda was serving no useful purpose. An article published in *Pravda* on May 14, 1977, under the pseudonym "Aleksandrov," was outstanding in the barrage that followed. In addition to reviewing Moscow's charges of Chinese expansionist tendencies, "Aleksandrov" accused arms manufacturers in the United States, Japan, and West Europe of wanting to sell arms to Peking; by implication, he warned them not to do so.⁴

THE RE-EMERGENCE OF TENG HSIAO-P'ING

Teng Hsiao-p'ing was rehabilitated for the second time in July, 1977, and regained a leading role in the formulation of China's domestic and foreign policy. Again, he gave the impression that he did not want to provoke Moscow and, indeed, that he was trying to conciliate Soviet leaders in minor ways, while conceding nothing of substance. In October, 1977, for example, a Chinese delegation concluded a negotiating session with its Soviet opposite number on the navigation of border rivers (the Amur and the Ussuri), while denying (contrary to the Soviet version) that an agreement had actually been reached.⁵ Peking sent an ambassador to Moscow at the end of August, 1977, after a lapse of about 18 months during which time the embassy had been directed by a chargé d'affaires. Shortly thereafter, on November 7, 1977, Foreign Minister Huang Hua attended a reception at the Soviet embassy in Peking.

On the other hand, anti-Soviet statements continued. In September, 1977, for example, Teng told a group of Japanese that the Sino-Soviet alliance was a dead letter, important information for Japan, since Japan is named in the Sino-Soviet treaty as the likely adversary.⁶

The period after Teng's second rehabilitation was marked by activities and accomplishments that were bound to give Moscow concern on three distinct levels. The first was long-term and derived from the fact that China was hostile and was apparently building up her industrial and military strength at an impressive rate. The second was middle range and related to Soviet President Leonid Brezhnev's declining health—demonstrated during his visit to Bonn in May, 1978, for example—and his probable reluctance to leave Soviet relations with China in an unsatisfactory state (compared with Soviet relations with the United States and West Germany, which were relatively stable). The third was short-range and stemmed from China's support of Cambodia and consequent pressure on Moscow's informal ally, Vietnam.

Even before Teng's rehabilitation in 1977, Peking once again hoisted the banner of Chou En-lai's "four modernizations" (agriculture, industry, national defense, and science and technology), which had been opposed by the Shanghai radicals. Since Teng had been one of the most enthusiastic supporters of the four modernizations, his third coming in 1977 brought an even greater attention to modernization. This was to be achieved in part through increased imports of technology from Japan and the West, the latter to be paid for (it was hoped) through expanded Chinese exports of coal and oil. On February 16, 1978, China signed an eight-year trade agreement with Japan, and on April 3 she signed a similar agreement with the European Economic Community. There were signs that China wanted to acquire modern weapons from

³For commentary see *The Washington Star*, October 16, 1976.

⁴I. Aleksandrov, "Peking: A Course toward Wrecking International Détente under the Guise of Anti-Sovietism," *Pravda*, May 14, 1977.

⁵The Chinese version was released by New China News Agency on November 6, 1977; the Soviet version, alleging that an agreement had actually been reached on "measures to improve navigation conditions," was released by Tass on October 7, 1977.

⁶Agence France Presse dispatch, September 14, 1977.

West Europe, perhaps from Japan, and conceivably from the United States. Thus China's leaders were improving the outlook for China's economy and military posture and for her external relations.

THE BORDER DISPUTE

On February 24, 1978, only two days before the opening of China's Fifth National People's Congress (and obviously hoping to influence its outcome), Moscow privately suggested that China and the Soviet Union issue a joint statement to the effect that their mutual relations would be based on peaceful coexistence. This overture was rejected by China on March 9.⁷ In this note of rejection and in Premier Hua Kuo-feng's report to the National People's Congress (February 26), Peking again alleged that Chou and Kosygin had reached an agreement (September 11, 1969) on the avoidance of armed clashes and on a mutual troop withdrawal from "disputed areas" (it has been plausibly reported that some such agreement had actually been reached, only to be vetoed by the Soviet military). The March 9 message and the Hua report demanded a Soviet military withdrawal from the Mongolian People's Republic—which the Chinese had been publicly demanding for several years—and from the entire length of the Sino-Soviet border region, a demand made publicly for the first time.

Although obviously unacceptable to the Soviet Union, China's demands were treated mildly in the Soviet editorial of March 21 that announced the Chinese rejection of the February 24 proposal; the demands were described in passing as "unacceptable preliminary conditions that it [i.e., Peking] had advanced before."⁸ The elapsed time (March 9-21) had been ample for Moscow to study and consider the Chinese response and demands. It can only be concluded that, although they were of course objectionable, they did not appear unduly alarming at that time. On April 1, however, another Soviet editorial took a much stronger line. It explicitly and vehemently denied the existence of any agreement between Chou and Kosygin. As for the Chinese proposal for a mutual withdrawal from the "disputed areas," the editorial was most emphatic:

... a unilateral [N.B. Peking had been demanding a mutual] withdrawal of Soviet armed forces from the "disputed areas," ... to all intents and purposes would open the border along a front extending for thousands of kilometers; as a result, the Soviet population would be left with no protection or cover, while Chinese troops would remain on the old frontiers and the Chinese authorities would receive an opportunity to "assimilate" these areas.

In this exaggerated and emotional passage, the voice of the Soviet military is detectable. The Chinese demand for a Soviet military thinning-out along the entire border was also rejected; and Soviet troops were said to be in the Mongolian People's Republic at Ulan Bator's request. Neither matter had been raised at the Chou-Kosygin talks.⁹

By the time this strong editorial was published, Brezhnev had already started on an unusual tour (March 28-April 9) of Siberia and the Sino-Soviet border region in the company of Defense Minister D. F. Ustinov. Their itinerary and behavior strongly suggested that the main purposes of the trip were to brandish a stick at the Chinese and to reassure the Soviet military and the populace that no withdrawal was being contemplated by the party leadership.

Evidently Moscow had become alarmed in the week or ten days beginning March 21, 1978; a glance at the public record reveals some plausible explanations.

On March 21 various newspapers, including *The New York Times*, published a photograph of two Chinese military men inspecting a West German Leopard tank. This photograph created a sensation in the Soviet Union and East Europe; Moscow has a notorious two-front complex and has long been worried (or at least has claimed to be worried) about the possibility of a "Bonn-Peking axis," an alignment between its two most potentially threatening Eurasian neighbors.

On March 23, the Japanese government announced its plan to resume active negotiation for a treaty of peace and friendship with China. The Soviet Union was nervous about the possibility of cooperation between Peking and Tokyo directed against Moscow, a contingency that heavy-handed Soviet treatment has tended to make more rather than less likely.

In the same period, shortly after the middle of March, Cambodian forces renewed their war with their Vietnamese adversaries, using weapons recently supplied by China; probably in retaliation, Vietnam increased her pressures on overseas Chinese living in Vietnam, thousands of whom fled to China. This treatment of the Chinese in Vietnam and the Vietnamese-Cambodian conflict increased the already considerable tension between Peking and Hanoi (Soviet sympathies being strongly with Vietnam), and the fact that the Vietnamese pulled back from the fighting reminded the Soviet military that the Soviet Union should not withdraw from the Chinese border.

Because Peking could not afford to ignore the Soviet

(Continued on page 126)

⁷Text of both documents in *Peking Review*, no. 31, March 31, 1978.

⁸"On Soviet-Chinese Relations," *Pravda* and *Izvestiia*, March 21, 1978.

⁹"Reality and Fabrications," *Pravda*, April 1, 1978.

Harold C. Hinton has published numerous works on Chinese politics and the international politics of the Far East, including *The Sino-Soviet Confrontation: Implications for the Future* (New York: Crane, Russak, 1977). He has traveled widely in Asia since World War II.

BOOK REVIEWS

ON THE SOVIET UNION

THE SOCIAL AND POLITICAL THOUGHT OF LEON TROTSKY. *By Baruch Knei-Paz.* (Oxford, England: Oxford University Press, 1978. 629 pages, bibliography and index, \$34.95.)

This book is a detailed analysis of the ideas, the actions and the writings of Leon Trotsky, leader and an ardent supporter of the Russian Revolution.

O.E.S.

SOVIET SCIENCE. *By Zhores A. Medvedev.* (New York: W.W. Norton & Company, Inc., 1978. 265 pages, appendices, biography, notes and index, \$10.95.)

Medvedev, a prominent Soviet scientist who is now living in the West, writes a history of the scientific achievements of the Soviet Union and emphasizes the interaction between the scientific world and the political aims of the government. He concludes that "Soviet science is not only the instrument of the development of Soviet economic and military power, it is also the main channel of knowledge about the outside world and cooperation with the outside world."

O.E.S.

CONTEMPORARY SOVIET POLITICS—AN INTRODUCTION. *By Donald D. Barry and Carol Barner-Barry.* (Englewood Cliffs: Prentice-Hall, Inc., 1978. 406 pages, appendices, glossary and index, \$8.95 paper.)

This work includes a brief history of Soviet political history, but its main focus is contemporary Soviet politics in the post-Stalin period, the problems that faced the Soviet Union and the "policies which have been fashioned or proposed to cope with these problems." The extensive index and notes will be of great value to the student.

O.E.S.

THE PUNISHED PEOPLES. *By Aleksandr M. Nekrich.* (New York: W.W. Norton & Company, Inc., 1978. 238 pages, notes and index, \$10.95.)

Early in World War II, Nazi forces occupied parts of the Soviet Union in the Crimea and Caucasus; the population of this region is largely non-Russian, comprised of Tartars and similar groups. In this territory, the occupying German forces set up their own administrative apparatus, using Soviet citizens, recruiting them for action against the active partisan forces and even for front-line service. Approximately one million people, former Soviet citizens, served under the occupying German forces. With the retreat of the Nazis from

this former Soviet territory, Russian troops entered the area in 1943-1944 and deported some one million people to Central Asia and Siberia as punishment.

Aleksandr Nekrich writes of this deportation and the subsequent events in the history of the deportees. Nekrich himself left the Soviet Union in 1976 in order to write freely as an historian.

O.E.S.

DOCUMENTS IN COMMUNIST AFFAIRS.

Edited by Bogdan Szajkowski. (Swansea, Wales: Christopher Davies Ltd., 1978. 363 pages and index, £6.95, cloth; £4.50, paper.)

This work contains documents from original sources to give an assessment of the major developments in the nations of the Communist world.

O.E.S.

THREE FACES OF MARXISM: THE POLITICAL CONCEPTS OF SOVIET IDEOLOGY, MAOISM AND HUMANIST MARXISM. *By Wolfgang Leonhard.* (New York: G.P. Putnam's Sons, 1978. 497 pages, selected bibliography and index, \$5.95, paper.)

Wolfgang Leonhard deals with "the political ideas of Marxism from 1848 to 1968," including the changes in Marx's political concepts as they have developed into "Soviet Marxism-Leninism, Maoism and humanist Marxism."

O.E.S.

POWER AND POLICY IN COMMUNIST SYSTEMS. *By Gary K. Bertsch.* (New York: John Wiley & Sons, Inc., 1978. 186 pages, illustrations and index, \$6.95, paper.)

Gary Bertsch takes a comparative approach to the goals, actions and outcomes of the Soviet, Chinese and Yugoslav models of Communist states. He attempts to assess "the impact of communism on the lives of the people" rather than on their leaders. He notes that when judged against a "general Communist conception of . . . a preferred state of being—a political community of democratic rule, trust and respect, equality and well-being, and enlightenment and comradeship. . . . [these states] are still far removed from the ideals of communism."

O.E.S.

SOVIET-AMERICAN RIVALRY. *By Thomas B. Larson.* (New York: W.W. Norton & Company, Inc., 1978. 308 pages, bibliography and index, \$13.95.)

The end of World War II "ushered in a new stage

in Soviet-American relations, one marked by global rivalry" Thomas Larson discusses this rivalry in great detail and traces and documents the background of the developments in both countries. He believes that this rivalry between the two strongest members of opposing systems will continue for decades. O.E.S.

PHILIP MIRONOV AND THE RUSSIAN CIVIL WAR. *By Sergei Starikov and Roy Medvedev.* (New York: Alfred A. Knopf, 1978. 267 pages, glossary, notes and index, \$15.00.)

Philip Mironov was a leader of the Russian Revolution who commanded large units of the Red Army in 1918-1919. In 1921, he was arrested for treason and was murdered in prison before his trial. Since 1960, the Soviet hierarchy has permitted his name to be gradually cleared. O.E.S.

CITIZEN INSPECTORS IN THE SOVIET UNION: THE PEOPLE'S CONTROL COMMITTEE. *By Jan S. Adams.* (New York: Praeger Publishers, 1977. 232 pages, selected bibliography and index, \$9.95.)

Jan Adams describes an institution that "provides the framework both for individual involvement in decision-making at a place of employment and for citizen appeals against the decisions of Soviet administrators." O.E.S.

SOVIET AND AMERICAN SOCIETY: A COMPARISON. *By Paul Hollander.* (Chicago: The University of Chicago Press, 1978. 476 pages, bibliography, notes and index, \$7.95, paper.)

This is an updated version of a 1973 edition of Paul Hollander's work. Hollander compares the major contemporary social institutions and problems in the U.S. and the U.S.S.R. from a sociological point of view. Notes and bibliography are extensive and useful for further research. O.E.S.

CONTAINMENT: DOCUMENTS ON AMERICAN POLICY AND STRATEGY, 1945-1950. *Edited by Thomas H. Etzold and John L. Gaddis.* (New York: Columbia University Press, 1978. 449 pages and index, \$25.00, cloth; \$7.95, paper.)

The authors present a comprehensive picture of the Truman administration's strategy of containment of the Soviet Union, using many recently declassified documents. O.E.S.

SOVIET NAVAL INFLUENCE: DOMESTIC AND FOREIGN DIMENSIONS. *Edited by Michael McGwire and John McDonnell.* (New York: Praeger Publishers, 1977. 657 pages, \$40.00.)

This volume on Soviet naval capabilities and policy neatly complements its two predecessors.

More than half the essays deal with the foreign policy implications of Soviet naval activities and power. With the earlier volumes, this is a valuable addition to our knowledge, a "must" for specialists on Soviet and national security affairs.

Alvin Z. Rubinstein
University of Pennsylvania

SOVIET ARMED FORCES REVIEW ANNUAL. *Edited by David R. Jones.* (Gulf Breeze, Florida: Academic International Press, 1977. 278 pages, \$29.50.)

This is the first volume in what the editor hopes will be an annual publication on the Soviet armed forces. In addition to the five branches of the Soviet armed forces, special topics are treated, including "Ballistic Missile Defense," by C. G. Jacobsen, and "Soviet Think Tanks." A.Z.R.

ALEXANDER GUMBERG AND SOVIET-AMERICAN RELATIONS 1917-1933. *By James K. Libbey.* (Lexington, Kentucky: University Press of Kentucky, 1977. 229 pages, bibliographical essay and index, \$13.50.)

An American businessman of Russian origin who found himself a translator and secretary for several Western organizations in Russia in 1917 is the subject of this interesting monograph. Historians of early Soviet-American relations will find useful insight into elite perceptions, and misperceptions, of the period. A.Z.R.

LENIN'S LEGACY: THE STORY OF THE CPSU. *By Robert G. Wesson.* (Stanford, California: Hoover Institution Press, 1978. 318 pages, appendix, bibliographical note and index, \$5.95, paperback.)

This highly readable, informative analysis of the Communist party of the Soviet Union should serve admirably as a text for courses on Soviet government and politics. Wesson's treatment covers considerable ground: the economic transformation, foreign policy changes, and intra-party struggles. He sees the party as the dominant Soviet political institution, jealous of its power and fearful of change. The challenge it faces is how to adapt to technological imperatives without weakening its hold on society. A.Z.R.

Miscellany

THE COUNTER-INSURGENCY ERA: U.S. DOCTRINE AND PERFORMANCE, 1950 TO THE PRESENT. *By Douglas S. Blaufarb.* (New York: The Free Press, 1977. 356 pages, selected bibliography and index, \$12.95.)

This is an important book for students of American foreign policy. It highlights the fact that United States leaders are preoccupied with military solutions for intractable political problems. Specifically,

it focuses on the "counterinsurgency" doctrine formulated in the administration of President John F. Kennedy and shows how it shaped and warped U.S. involvement in Vietnam.

Recently, the strategic views and assumptions that prompted the counterinsurgency approach have apparently been discarded, presumably because of their failure in Vietnam. But the author suggests that in a changing world the United States may have to learn how to fight such wars.

A.Z.R. ■

SOVIET-AMERICAN RELATIONS

(Continued from page 119)

West Europe, seeking to project Soviet power globally, or demonstrating dictatorial control over Soviet society. Had Khrushchev remained in power longer, it is at least thinkable that the situation might have changed. In contrast to his early rocket-rattling, Khrushchev's latter-day policies conveyed hints of receptivity to the doctrine of mutual assured destruction, readiness significantly to reduce the size of the Soviet armed forces, sensitivity to the domestic costs of global muscle-flexing, and sympathy for reformist causes. These were merely hints, however, and they came from a man who (his colleagues concluded) was a "hare-brained schemer" who must be overthrown in favor of a "normal" ruler.

Although "normalcy" was not equated with full-fledged Stalinism, it did bring a revival of many Stalinist (and pre-Stalinist) priorities and practices, including very heavy reliance on military self-aggrandizement, coercive diplomacy and police repression. Far from being a purely paranoid reaction, moreover, this neo-Stalinist "normalization" was rooted in a justifiable apprehension that the regime's domestic legitimacy was tenuous and that the realization of the country's "manifest destiny" as a great world power was one of the few popular aspirations that could be satisfied without inviting a political crisis or thoroughly overhauling the Soviet system.

THE FUTURE

It does not follow from this somber and tentative conclusion that the men who are about to replace the gerontocrats who currently occupy the Kremlin will necessarily continue in their predecessors' footsteps. If nothing else, the case of Khrushchev serves as a reminder that "deviationists" can ascend to power. And there is little doubt that some members of the emergent ruling elite will respond to what seems almost certain to be a slowdown in economic growth rates and a rise in tensions among the country's major nationalities by advocating a cutback in military

spending and a concentration on domestic civilian development projects, if not on political liberalization.

Nevertheless, historical experience indicates that the influence of the military-industrial complex tends to rise during periods of leadership succession, and the bulk of the emergent ruling elite is likely to subscribe to Brezhnev's view that the best, if not the only, way to deal with recalcitrant and potentially explosive domestic problems is to try to demonstrate that the international "correlation of forces" is shifting in the Soviet Union's favor. Given the unprecedented capacities that Brezhnev will be leaving as a legacy, moreover, some members of the leadership are likely to be tempted to try to alleviate their economic (and their nationality) problems by turning to international adventures—for example, attempting to establish hegemonial Soviet control over resource-rich neighbors like Iran.

It is patently beyond the scope of these brief notes to examine the possible effects of continuing or escalating Soviet militancy on vital American and Western interests or to suggest how these interests might best be defended. However, it does seem appropriate to state explicitly what the preceding allusion to Iran implies—namely, that it would not take a Soviet attack on the United States or a Soviet demarche on West Europe to place some of these interests in serious jeopardy. It seems worthwhile to express deep skepticism that heavy United States investments in Soviet energy development projects provide the cheapest and most reliable means to deter a Soviet-Iranian "adventure." Not only would such investments fail significantly to diminish (or perhaps to diminish at all) the value of Iranian oil in Soviet eyes, they would be unrecoverable once made and, once committed, could only be withheld by a powerful President who could mobilize the now nonexistent political coalitions that would be required to overcome the strong domestic and international opposition to their withdrawal. Finally, it is hard to refrain from suggesting that the word "détente" be dropped from official descriptions of United States-Soviet relations until the Soviet Union curbs its relentlessly competitive impulses and begins to play a more constructive and responsible international role.

There is no intrinsic reason why "détente" cannot be used to describe the process of trying to manage a long-term competitive roughhouse without resorting to violence. But this is not its traditional meaning, and the benevolent connotations of that meaning make it more difficult for Westerners to remember that they are, indeed, competitors. As for the Soviet participants, they rarely use "détente" to describe their own policy, preferring the Russian "*razriadka*" which has a much more neutral meaning (the discharge of dangerous tensions) and even has distant connotations of pretense or disguise.¹ ■

¹Thus, the verb *razriazhat* can mean either "to discharge" or "to overdress or doll up in a costume."

THE SOVIET ECONOMY

(Continued from page 112)

and for transportation.¹⁴ Thus the Soviet economy will face increases in the cost of energy, increases that it plans to pass on to its East European neighbors.

A fourth and most important component of the Soviet economic system is the defense sector. In recent years, there has been substantial Western debate about the size and rate of growth of Soviet defense spending. One source estimates that Soviet defense spending has risen approximately to 11 to 12 percent of the Soviet gross national product.¹⁵ In the Soviet Union, the defense sector has high priority and is presumably a source of technological advance, some of which may spill over into the civilian economy. At the same time, however, defense costs are a drain on the economy. For example, in a period of labor shortage, approximately 4 million persons are engaged in the defense sector.

The posture of Soviet leadership toward the defense establishment in the Soviet Union will bear closely upon the overall performance of the Soviet economy, because that establishment is a major claimant on Soviet resources.

A final element in the overall balance is the Soviet posture in the field of foreign aid. Soviet foreign aid has generally been modest, typically in a form requiring repayment and focused on relatively few countries. As such, foreign aid is not of major importance for the overall performance of the Soviet economy. However, to the extent commitments like those made to Cuba are extended, and to the extent that weapons become a more important element in Soviet exports (for example to Africa), this judgment might require reassessment.

THE SOVIET ECONOMIC FUTURE

Having established an industrial base, the Soviet economic system is entering the age of maturity. Although we have little experience to indicate how a centrally planned socialist system responds to maturity, nevertheless it is a credit to the system that it has reached this level of economic progress.

On balance, the Brezhnev era has been a search for rather traditional solutions to economic problems. In

¹⁴For a survey, see Emily E. Jack, J. Richard Lee and Harold H. Lent, "Outlook for Soviet Energy," in United States Congress, *op. cit.*, pp. 460-78; for a discussion of the expansion into Siberia, see Victor L. Mote, "Pacific-Siberian Growth Centers: A New Soviet Commitment," *Soviet Union*, vol. 4, part 2 (1977), pp. 256-70; Alan B. Smith, "Soviet Dependence on Siberian Resource Development," in United States Congress, *op. cit.*, pp. 479-99.

¹⁵United States Government, Central Intelligence Agency, *Soviet Economic Problems and Prospects* (Washington, D.C., 1977), p. 1.

TABLE 5: Soviet Economic Performance: 1976-1980

(average annual rates of growth)

Indicator	Plan 1976-1980	Actual 1976*	Actual 1977*
National Income	4.8-5.6	5.0	3.5
Real Income per capita	4.0-4.4	3.7	3.5
Industrial production	7.0-7.8	4.8	5.7
Agricultural production	2.8-3.4	4.0	3.0
Capital investment	4.8-5.2	4.0	3.0
Labor force	n.a	2.0	2.1
Trade volume	6.0-7.0	10.0	11.0

*In each case the figure shown is the percentage increase over the preceding year. All data are official Soviet figures. Sources: *Ekonomicheskaya gazeta*, 51 (1975), pp. 3-15; *Ekonomicheskaya gazeta*, 5 (1977), p. 4; *Ekonomicheskaya gazeta*, 6 (1978), p. 5.

contrast to earlier periods, when grandiose organizational reform programs were frequently announced and just as frequently abandoned, large-scale experiments and organizational panaceas have been viewed cautiously. As the economy adapts to change, the forces outlined above will be important, and the policy options chosen by the Soviet leadership will be most important.

The Soviet plan for 1976-1980 projects a continuing slowdown (see Table 5). However, the plan calls for a solid rate of expansion and a continuing improvement in the standard of living. Western estimates, although they differ in detail, generally project Soviet growth rates at or slightly below those projected by the Soviet economic plan.

The Soviet economy, like most economic systems, faces difficulties to which it must respond. Soviet planners have a substantial degree of control over their system. Indeed, some of the potential difficulties, for example, projected demographic trends, will turn out to be less severe. At the same time, however, the ability of the Soviet system to digest and to utilize modern technology effectively remains in doubt. Even though the output of consumer goods has grown rapidly in recent years, it is really not this growth itself that is important, but rather this growth relative to the growth in consumer expectations. Although we have no independent measure of consumer expectations in the Soviet Union, many observers would probably agree that in recent years they have outstripped the rate of growth in consumer goods. Thus it may be difficult for Soviet planners to adhere to a model that places primary emphasis upon the growth of heavy industry. ■

MOSCOW AND PEKING SINCE MAO

(Continued from page 122)

response, its support for Cambodia grew less obtrusive, although it continued an angry quarrel with Hanoi with regard to the Chinese in Vietnam. No

more was heard of military purchases from West Germany; China's attention apparently shifted to France, a country considerably less provocative in Moscow's eyes. As for Japan, an unprecedented intrusion by a fleet of armed Chinese fishing vessels into the waters around the disputed Senkaku Islands near Taiwan on April 12-16, 1978, indicated to Moscow that, regardless of the projected Sino-Japanese peace treaty, no significant collusion between Peking and Tokyo was intended. When China promptly minimized the importance of the incident in her explanations to the Japanese, it was clear that China had no serious desire to quarrel with Japan.

On April 26, Soviet Deputy Foreign Minister Leonid Ilyichev arrived in Peking for another round of talks on the border question, which began on May 4. Shortly thereafter, a serious border incident occurred at Soviet initiative on the morning of May 9.¹⁰ The Soviet military may have staged the incident to create an atmosphere that would make it less likely that Ilyichev would agree to any form of troop withdrawal. An alternative possibility, that Peking welcomed and exaggerated the incident in order to strengthen its case for troop withdrawal, appears implausible; Vice Foreign Minister Yu Chan's note of protest on the incident to Soviet Ambassador V.S. Tolstikov did not restate the Chinese position on troop withdrawal. Peking seems to have viewed the May 9 incident as a cause for concern and an occasion for propaganda. On May 12, it released a report on a recent (date unknown) "decision" by the important Military Affairs Committee of the Communist party of China urging enhanced military training and readiness and further political education for the People's Liberation Army.¹¹ Whatever the facts, the Soviet response did not satisfy Peking, and the border situation remained tense.

NO WAR, NO PEACE

These developments in the spring of 1978 appeared to push the pendulum of the Sino-Soviet confrontation closer to war. But there are important constraints on the Soviet Union, clearly the stronger of the adversaries, over and above China's already formidable and growing defensive and retaliatory power. These relate mainly to the Soviet Union's external environment, in particular Moscow's uncertainty about the

¹⁰The Chinese version, in brief, was that a Soviet military helicopter had crossed the Ussuri River on the morning of May 9, followed by an incursion on the ground; the Soviet version, in brief, was that border guards had crossed the Ussuri by mistake in pursuit of a criminal. See *Peking Review*, no. 20, May 19, 1978, and Western press sources for the period.

¹¹Peking Domestic Service broadcast, May 12, 1978.

¹²I. Aleksandrov, "Peking's Policy—Threat to Peace," *Pravda*, June 13, 1978; also Brezhnev's speech of June 25, 1978, in Minsk (*The New York Times*, June 26, 1978).

United States reaction to Soviet military action against China.

During the visit of United States Secretary of State Zbigniew Brzezinski to Peking in May, 1978, Brzezinski is reported to have discussed the Soviet problem with Chinese diplomats. One of the first visible results of the visit was the preliminary U.S. approval (subject to final agreement by NATO allies and Japan in COCOM, NATO's Coordinating Committee on trade with Communist countries) of the sale to China of advanced airborne scanning devices and recording equipment that could have military as well as civilian application. Clearly the United States was trying to "play the China card" to put pressure on the Soviet Union.

Other, probably less important, developments also tended to constrain Soviet behavior toward China. Romanian President Nicolae Ceausescu visited China in mid-May. Toward the end of May, at a special United Nations General Assembly session on disarmament, Chinese Foreign Minister Huang Hua delivered a scathing general attack on Soviet international behavior.

Soviet behavior continued to worry Peking. The Soviet initiative of mid-June, 1978, offering (in principle) equal conventional force ceilings for both sides in Central Europe, thereby theoretically freeing Soviet units for possible use against China, concerned Peking. At the same time, Soviet statements charged China with expansionist aims and a desire for foreign military equipment and accused the United States of endangering détente by "playing the China card."¹²

In spite of recent alarms, a Sino-Soviet war seems unlikely. A Sino-Soviet reconciliation seems even more unlikely, although by no means out of the question. The Chinese leadership resents Moscow's bullying behavior of recent years, seems determined not to appear to capitulate, and apparently believes that Moscow would only agree to a form of reconciliation that would give China semi-satellite status. ■

SOVIET POLICY IN THE MIDDLE EAST AND AFRICA

(Continued from page 116)

black African majorities by means of an anti-Communist crusade is a losing proposition unworthy of a leader who was elected to the presidency of the United States on the platform of the protection of human rights everywhere in the world. Moreover, as is evident from statements by a number of prominent black African leaders, efforts to present African problems as central to the East-West conflict are not likely to appeal to the nonaligned African community, whose goodwill the United States is on record as trying to cultivate.

Since the Soviet definition of détente has never

excluded superpower rivalry in the third world, Soviet and Cuban activities in Africa and elsewhere should not have come as a surprise. Domestic United States considerations aside, the real political questions should deal with the problems of gains and losses incurred by the United States and the Soviet Union as a result of Moscow's "forward" policy in Africa. An objective analysis of Soviet activities in the Horn and elsewhere leaves little doubt that the Kremlin has suffered a serious strategic and political setback in Somalia, and that, with no brighter prospects, the Soviet Union has taken on a new, major responsibility in Ethiopia. (This has been added to the previous commitment to Angola.) Leaving the Soviet Union to cope with these problems is the wisest course the United States can follow; the difficulties that the U.S.S.R. has encountered (and can be expected to encounter) as a result of its involvement in African affairs are substantial and can be expected to grow in the years to come. ■

THE SOVIET CONSUMER

(Continued from page 103)

tration of State Quality Inspection of Goods, almost 25 percent of all refrigerators inspected during 1973-1974 were defective, and 40 percent of those inspected in the first quarter of 1975 were defective.²⁴ As for washing machines, we do not know whether most of the washing machines that are being produced in ever greater numbers are automatic or manual. The only washing machines ordinarily available are the manual wringer type, which most consumers no longer want. Despite a 10 percent reduction in the retail price, these machines are not salable, while the semi-automatic models are in great demand but scarce supply. According to the State Quality Inspectorate, almost 20 percent of all washing machines produced in 1973 were defective, as were more than 25 percent of those produced in 1974.²⁵

Slow but perceptible progress is being registered in providing consumer goods to rural areas, but the urban-rural gap remains. To be sure, rural consumer demand for some items is limited by tradition and by a reluctance to adapt to new methods and new machines. The statistics tell nothing about demand, which may well be a factor in the limited sale of some items in rural areas; problems of transportation and supply of goods may be a more basic factor. Sales of

electrical appliances are severely hampered by the fact that only 370 stores in the entire country specialize in marketing them,²⁶ and it is unlikely that many of these are in the countryside. Thus, items like washing machines, vacuum cleaners, and furniture are not even included on official statistical tables of consumer goods sales in rural areas, although they feature prominently in urban sales. On the other hand, sales of television sets to rural consumers have more than doubled in the 1965-1975 period, while refrigerator sales have increased sixfold.²⁷

The Soviet press continually carries articles and cartoons that condemn merchandise of poor quality. Moreover, many newspaper editors encourage their readers to submit complaints regarding poor goods and services, a useful mechanism for defusing consumer dissatisfaction. Increasingly, there are suggestions for a more rational pricing policy to encourage consumer goods plants to produce better quality merchandise (more costly to produce), to be sold at substantially higher prices than goods of shoddy quality. Typically, better quality goods are slightly higher in price, but the price differential is not sufficient to offset the increased cost of labor and materials.²⁸

Sales per salesperson are unusually high, in comparison with other industrialized countries; customers, rather than sales personnel, continue to do the waiting. Moreover, frequently published complaints suggest that salesmen are neither knowledgeable about nor interested in the goods they handle and are, at best, indifferent to their customers. The retail trade system is poorly organized and is subject to continual delivery bottlenecks. Matching the supply of goods with customer demand remains generally inadequate, and the consumer typically experiences long delays in having his orders filled. Waiting lists are expected for popular items, and frequently the customer does not receive what he orders. Rather than submit to another indeterminate waiting period, he usually accepts whatever is offered.

The regime has not yet seriously confronted the shortage of storage facilities and the cluttering up of limited space with unsalable goods. (While the thrust of the 1965 reforms was to reduce the volume of unmarketable goods, little attention has been paid to the disposal of such goods.) Prices generally remain rigid: price-slashing does not encourage consumers to buy inferior quality, ill-sized, or unattractive merchandise. The March, 1978, 15-20 percent price reductions on small refrigerators and black and white television sets apparently did not stimulate a stampede for these goods.²⁹

Most shops that handle personal consumer items are specialty shops, so the consumer wastes a great deal of time going from one store to another to complete his shopping. Larger urban areas have

²⁴Ie. Kol'penitsky and I. Borozina, "Electrical Appliances: Market Demands," *Kommercheskii Vestnik*, 20 (October, 1975), p. 8.

²⁵*Ibid.*

²⁶*Ibid.*

²⁷*Nar. Khoz.* 1975, p. 594.

²⁸V. V. Zotov, "Price in the Motivation of Consumer Goods' Production," *Finansy SSSR* (June, 1974).

²⁹*The New York Times*, March 2, 1978.

department stores, but the quality of available goods is generally inferior, and sales assistance is frequently nonexistent. Thus, the time wasted in department stores is often equal to or greater than time wasted going from one specialty shop to another.

There has been some official effort to discourage the accumulation of consumer goods. "Rational consumption needs" must be taught, for some people "display a parasitical consumer attitude toward society . . . [there is] a distorted conception of the social prestige of a person when [his] value is defined by the amount of goods he can acquire."³⁰ Sociologists have worked out a "rational" wardrobe, i.e., what any sober-minded citizen should find sufficient, and have identified a "sensible accumulation" of consumer durables. The wardrobe which, for the 1960's, included 2.6 coats, 5 dresses, and between 2.5 and 5 pairs of shoes, is based on seasonal requirements, cleaning and repair possibilities, and occupational demands. Consumer durables include (by 1980), per person: 1.27 radios, .47 washing machines, 1.06 television sets, and .19 room air conditioners.³¹

THE PRIVATE AUTOMOBILE SECTOR

In May, 1966, the Soviet government signed an agreement with Fiat, the Italian automobile producer, to build an automobile plant at Tol'yatti, with a production capacity of 600,000 cars annually.³² Built at an approximate cost of more than one billion rubles, financed largely by Western credits, the plant began operation in 1970. The regime has also purchased Western technology to expand and modernize older auto plants, including the Moscow and Izhevsk plants, which produce the (relatively) inexpensive Moskvich. Total Soviet auto production reached 1.2 million units in 1975,³³ of which 60 percent were scheduled for private purchase. (By comparison, 1965 auto production totaled 167,000, of which a large majority were earmarked for official use or for use as taxis.) The regime markets a substantial

number of automobiles abroad, both to East Europe (in return for the production and shipment of auto parts to the Tol'yatti assembly lines) and to West Europe (in order to help offset mounting foreign debts). By setting prices of the Zhiguli (produced at Tol'yatti) and the Moskvich at prices equal to or lower than comparable autos produced in the West, and by emphasizing the ease of servicing the Zhiguli (because Fiat parts can be used and trained Fiat mechanics can repair them), the Soviets clearly hope to break into the European and even the American markets.

According to a 1969 *Voprosy filosofii* article on consumerism, a public opinion poll revealed that the average Soviet citizen wanted a private car more than any other single item.³⁴ Nonetheless, it is clear that private ownership contradicts the Marxist-Leninist precepts of socialist and Communist public or communal ownership. Ideologies have warned that in bourgeois societies autos have become a prestige symbol; socialist societies must guard against this. Moreover, the possession of a private auto can lead to individualistic, anti-social tendencies (but probably no more so than personal ownership of other expensive goods). The regime seems to have determined that the ideological drawbacks of private auto ownership are less important than the fact such ownership serves as an indicator of a modern industrialized society. Further, because of their high sale price (plus the mandatory bribe to insure delivery), autos are available primarily to the higher income (white collar intelligentsia and party apparat) sectors of the population, whose support the political leadership is anxious to retain. It is also possible that President Leonid Brezhnev's personal predilection for private autos has given additional impetus toward the rapid and large-scale expansion of auto production. Indeed, the Fiat arrangement was concluded less than two years after Nikita Khrushchev's ouster. (Khrushchev himself had frequently declared his opposition to private automobiles, and production figures for the early 1960's suggest that there were no plans for expansion.)

The decision to create a private automobile sector without delay was not taken without regard for the necessary support system, including service and maintenance shops, trained service personnel, the availability of spare parts, filling stations and gasoline, the expansion of the paved highway network, and off-street parking facilities in congested urban areas. Despite plans for a sizable increase in these facilities during the early 1970's, construction has been considerably slower than anticipated; verbiage aside, there is no concrete evidence that the current plan will pay greater attention to this sector, although there have been frequent proposals that auto owners build and maintain cooperative service centers. Not unexpectedly, the press is full of anecdotes about the

³⁰V. Zeyle, "Growth of Consumption and Formation of the Fully Developed Personality," *Kommunist Sovetskoi Latvii*, vol. 11 (November, 1974), p. 21. For the past several years, *Literaturnaia gazeta* has been filled with articles decrying overacquisition and expounding upon its evils.

³¹Philip Weitzman, "Soviet Long-Term Consumption Planning: Distribution According to Rational Need," *Soviet Studies*, vol. 26, no. 3 (July, 1974), pp. 311-315.

³²Much of the following comes from the very detailed discussion in Imogene U. Edwards, "Automobile Trends in the USSR," in U.S. Congress, Joint Economic Committee Report, *Soviet Economic Prospects for the Seventies* (Washington, D.C.: Government Printing Office, 1973).

³³*Nar. Khoz.* 1975, p. 265. In 1970, 344,000 autos were produced.

³⁴William R. Baxter, "The Soviet Passenger Car Industry," *Survey*, vol. 20, no. 3 (88) (summer, 1973), p. 28. See also the general discussion in John M. Kramer, "Soviet Policy toward the Automobile," *ibid.*, vol. 22, no. 2 (99) (spring, 1976).

difficulties of auto servicing, the non-availability or high cost of gas at filling stations, and under-the-counter gas sales.³⁵ None of these inconveniences seems to have dampened the enthusiasm of the Soviet consumer, who appears more eager than ever to own an auto.

THE SERVICE AND MAINTENANCE SECTORS

Just as the servicing of private automobiles has been difficult for auto owners, so the owners of consumer durables face continuing difficulties in the servicing and repair of these items. According to one Western economist, the small volume of services is currently perhaps the most outstanding feature of the Soviet economy. Far fewer people are engaged in service industries in the Soviet Union than in any other country at a comparable level of economic development.³⁶ The average wage for workers in the service sector is 113 rubles per month, not quite 75 percent of the national average.³⁷ So far, the regime has done little to encourage people to work in the service sector by making service jobs attractive financially or by training people for service careers.

As more household goods and appliances become available, the possibilities of maintenance and servicing become more remote. After spending time traveling to service establishments and waiting on line to be served, customers expect to be told that the needed spare part for their television set or electric iron is unavailable. Shortages result from an insufficient volume of production, an inadequate system of distribution from manufacturer to repair shop, and the non-interchangeability of spare parts. Each of these factors, resolved individually, would reduce the interminable repair delays, but the economic planning bureaucracy consistently has assigned low priority to the entire service sector.

In the personal sector, lack of service is even more pronounced. For example, although the number of establishments that repair furniture has increased by approximately 30 percent since the mid-1960's, the amount of furniture repair has increased sevenfold. The number of dry cleaning establishments has doubled, but the volume of dry cleaning has increased tenfold. Television, consumer appliances, and metal repair enterprises have increased by approximately 60 percent, while their volume of business has quadrupled.³⁸ Indeed, the regime demonstrates its in-

creased attention to consumer services by emphasizing the expanded volume of services handled annually, through the publication of statistics that mask the basic fact that every service establishment is hopelessly overburdened and understaffed.³⁹ This situation contributes to consumer dissatisfaction, and the regime will soon need to confront these frustrations as it confronted the unsatisfied growing demand for consumer goods a decade ago.

CONSUMER POLICY

Despite the lack of attention to the service and sales sectors, the Soviet political leadership has been more concerned than ever in its history with raising the population's consumption levels substantially and channeling a significantly larger percentage of state funds into the light industrial and agricultural sectors of the economy. A number of factors seem to have contributed to the policies that can be lumped together under the rubric "consumer policy"; today, the leadership is virtually compelled to continue and expand this policy.

By the 1960's (even prior to Brezhnev's accession to power), the Soviet economy was so mature that the population could no longer be expected to refrain from expressing consumer demands. Consumer policy during the Khrushchev years aimed to expand social wage benefits: housing, public transportation facilities, health care, social security payments, and education. Each of these programs was costly but each was a necessity when the post-Stalin leadership began to address the people's needs after Stalin's death signaled the end of decades of popular deprivation imposed to create a powerful industrial state. With the exception of housing, which remains in scarce supply and is inadequately maintained in most urban centers, most of the basic needs of the population were met by the 1960's.

The rising standard of living to which these social policies directly contributed led to demands for the greater availability and improved quality of consumer goods. It must have been clear to the leadership that the people were psychologically long overdue for a consumer goods policy, which could no longer be postponed; the greater availability of desired goods would motivate them to work more productively, because there would be goods on which they could spend their increased earnings. Thus, the consumer policies of the 1960's and 1970's are in direct contrast to those of the Stalin era, when the population was forced to work hard, was paid meagerly, and found very little to buy in retail shops.

Contact with foreigners is another factor contributing to increased consumer demand. Although only a few Soviet citizens meet Westerners in the Soviet Union, word travels quickly about the abundance of goods abroad that are not available or are available

³⁵A. Parshin, "How Gasoline Evaporates," *Sovetskaia Latvija*, July 3, 1975.

³⁶Gur Ofer, *The Service Sector in Soviet Economic Growth* (Cambridge: Harvard University Press, 1973), pp. 1, 33, 34. Unfortunately, the author relies on data from the 1960's and on the 1959 rather than the most recent (1970) census.

³⁷*Vestnik statistiki*, 11 (1977), p. 90.

³⁸*Nar. Khoz.* 1975, p. 661.

³⁹See, for example, unsigned, "Domestic Services," *Ekonomicheskaja gazeta*, 43 (October, 1975).

only sporadically in the Soviet Union and are of poor quality. Foreign radio broadcasts contribute further information. According to a recent *Kommunist* article, "Détente's expansion of contacts . . . with the highly developed capitalist countries undoubtedly leads to a certain enlargement of the range of material expectations of the Soviet people and the rise of new needs," particularly among the youth.⁴⁰ Although Soviet citizens generally are not allowed to travel to the West, many have visited East Europe, where the availability and quality of goods are superior to availability and quality in the Soviet Union. Soviet citizens are not reluctant to express their views that consumer goods quality and quantity should at least equal that of East Europe, if not the West.

Further, once basic consumer demands were largely satisfied, at least in non-rural areas, citizens began to develop more refined tastes, which led to their refusal to buy inferior merchandise. The simple demand for refrigerators has become more specific: small refrigerators with tiny freezer compartments are no longer wanted and have become largely unmarketable. Consumers have begun to demand merchandise choice, and they are becoming more style conscious. A customer who already owns a black winter coat might buy another coat but not if all coats are black.

Apart from responding to popular demands, the regime has a direct interest in expanding the consumer goods sector, which is generally accepted worldwide as a basic feature of industrialized societies. As a model for the developing countries of the socialist alternative to capitalism, the Soviet Union cannot afford to postpone attention to consumer goods and services indefinitely: what country would choose an economic system that maintained and indeed even thrived on a depressed standard of living? Thus, to enhance its self-image and its international prestige (and here, too, expanded contacts between Soviet and non-Soviet citizens have provided a more accurate assessment of Soviet living conditions), the Soviet leadership has had to turn its attention toward raising consumption levels.

Finally, a desire to increase its popularity may well motivate the leadership to adopt consumer-oriented policies. Toward this end, more and better quality items are being made available to everyone, especially to those sectors of the population whose continued support is important to the ruling elite. Despite steep price tags, consumers have flocked to buy reasonably good quality merchandise; goods remain unsold be-

cause they are of substandard quality or are too primitive in design or function to satisfy the customer, not because their price is too high.

The Soviet political leadership has committed itself and its heirs to an overall consumer policy, and this attention to consumer needs will probably be continued and broadened. A contrary decision would be politically unwise; after popular outcry, it might cause the regime embarrassment and might ultimately compel it to retract restrictive measures (as the food riots resulting from substantial price increases did in the early 1960's).⁴¹ The current consumption policy poses several basic problems for the leadership that it will have to resolve during the next several years. First, the rising costs of the subsidies of basic foodstuffs could be reduced as output increases and is distributed more efficiently. The leadership will have to provide sufficient incentives within the confines of the collective and state farm system to encourage farmers to work more productively. Second, the regime will have to insist on better quality goods by providing better basic materials and incentives for good workmanship. The 1965 reforms are a first step in addressing this problem, but the Soviet press suggests that far greater attention is needed.

Third, the next major consumer thrust will have to be in the fields of sales and service, especially service. Trained maintenance and repair personnel are desperately needed, and these occupations must be upgraded in salary and status. Hundreds of additional repair shops must be opened, and materials and spare parts for repair or replacement must be made available. Consumer frustration with the costly and inadequate service network cannot be restrained and muted indefinitely. The expansion of personal services is less critical for consumer goodwill, but the leadership would be ill advised not to pay attention to these demands.

The Soviet Union has entered the consumer age; despite the ideologically inspired directives with regard to rational consumption needs and norms, the Soviet consumer's self-defined needs rather closely resemble those of his Western counterparts. It remains to be seen whether the leadership is able to create a socialist consumer society distinguishable from the Western model. ■

SOVIET SCIENCE AND TECHNOLOGY

(Continued from page 108)

cryogenic superconducting electric-power transmission line which allows little energy loss in transmission of power. A closed continuous underground circulation system covering huge regions could serve as a warehouse of energy. Soviet researchers have made full use of international cooperation on this project. There is a coordinating center connected to

⁴⁰V. Pechenev, "Rising Consumer Expectations and the Formation of the New Man," *Kommunist*, 18 (December, 1976), p. 69.

⁴¹See the account in Aleksandr I. Solzhenitsyn, *The Gulag Archipelago, V-VII* (New York: Harper and Row, 1978), pp. 507-514.

CEMA, and a joint American-Soviet experimental line has been planned.³² At the 1977 yearly general meeting of the Soviet Academy of Sciences, its president spoke with confidence of semiconductor current converters for powerful direct current transmission lines.

Computers are the subject of a comprehensive program that calls for research and design based on microelectronics. Some of the new directions being charted in the Soviet Union involve applying holography, lasers, cylindrical magnetic domains, and both solid and liquid information carriers.³³

During the current five year plan, computer-based automation of technological processes is to increase by more than 100 percent over the ninth five year plan.³⁴ One program for the creation of fully automated machine tool sectors has as its goal entire shops controlled by a single computer.³⁵

The broad commitment to computerization may not rest only on labor productivity, but rather on hopes for management productivity. In a directed society, management failures have frightening repercussions. Soviet leaders do not believe in any inherent superiority of one natural group over another. Therefore, if the Soviet researcher has not produced adequate materials for advanced aircraft engines, or for efficient computer programs, middle management must be blamed. According to Ponomarev, the party attributes great importance to the problem of the style of directing science.³⁶ Soviet leaders fear that if science is not managed largely by computerizing management, science and technology

demands will run away with resources of the state and become the determinant of Soviet policy rather than instruments of it. On the positive side, there is a feeling that the Soviet Union can leapfrog its general technological backwardness by a new style of management know-how, based on a linking of computers and experienced executives.

There is still a long way to go before optimum planning and management are achieved. Despite frequent statements that the research-into-production cycle takes at least 15 years, the coordination plans of the ninth five year plan generally covered only three years.³⁷ The characteristics of the current complex comprehensive program plans are not known, except that they cover five years and include target dates for completion and deadlines for all stages of intermediate work. The responsibilities of participating organizations are defined.³⁸ There is much room for improvement in planning science programs.³⁹

COMMITTED RESOURCES

Resources are basically of two kinds—human and material. Human resources consist of the research community and their immediate managers plus top-level planners and managers. Actually, the time spent by the Soviet political leadership is also a resource from the Soviet point of view. Soviet leaders give a great deal of attention to the specifics of science and technology. Some of them, like Brezhnev, have had experience in a research or technology environment. The material resources discussed here are the rubles placed at the disposal of the research community. Supply problems, which are as important as the initial funding, are not included.

The number of workers engaged in science and scientific service was four million in 1977; this included 1,254,000 scientists. The growth rate of scientific workers was nearly four times greater than the average personnel growth rate for the national economy. The U.S.S.R. Academy system employs 7.5 percent of the nation's scientific personnel. The higher schools employ another 37.5 percent. The Academicians and some educators engage, in part, in basic research. The rest of the scientific personnel work on the development of research results for application in the economy. All are employed in tens of thousands of research facilities, either subordinate to a ministry or to a chartered organization like one of the Academy of Sciences. Some 100 types of research institutes exist among these thousands.⁴⁰

The problem faced by the administrators of the Academy, the State Committee of Science and Technology, and their counterparts in Gosplan is to measure the effectiveness of a ruble spent on research as opposed to the same ruble if it were spent on capital investment or even on consumer satisfaction.⁴¹ Science is unlike production, in which there is an assumption

³²"Prospects for Cryogenic Superconducting Power Lines," *Izvestiya*, February 4, 1977, p. 4.

³³O.G. Zhimerin, "A New Stage in Development of Computer Technology and Systems," *Ekonomicheskaya Gazeta*, no. 22, May, 1978, p. 7.

³⁴"Conference Discusses Computers and Computerized Systems," *Pravda*, May 16, 1978, p. 2.

³⁵"Comprehensive State Programs of R&D Work," *Sotsialisticheskaya Industriya*, no. 33, February 9, 1977.

³⁶Ponomarev, *op. cit.*

³⁷Kosov, *op. cit.*

³⁸M. Kovalev, "Inter-Industry Scientific and Technical Programs," *Krasnaya Zvezda*, August 12, 1976, p. 2.

³⁹Some of the newer administrative forms being used are the research-production corporations and implementation firms. Intersectional national economic complexes may be a future form. See Kamayev, *op. cit.*

⁴⁰Y. Azhazha and M. Amusin, "Improve the Organization of Science," *Sotsialisticheskaya Industriya*, October 12, 1977, p. 2. G.I. Marchuk, "The Central Role of the Academy of Sciences," *Sovetskaya Rossiya*, no. 21, January 25, 1977, p. 2. The latter source states that there are 5,000 institutes, 40,000 planning and design bureaus, and 850 higher schools that conduct research.

⁴¹The power these men exercise in the careers of their fellow scientific workers is very great. (Kirillin, the ideologue and party auditor, alone could make or break a scientific career.) They can command the extra efforts of non-paid problem council work. Under the State Committee

that products are created in proportion to the factors brought together. But bringing expensive scientists together with expensive equipment in expensive laboratories can easily result in total failure. It is seldom a matter of degree—there is no return to scale. Despite this almost certain uncertainty, measures of effectiveness continue to be sought.

The effect of technology on production has been declared to be capable of measurement; if so, this will aid the resource allocators greatly. The expensive aspects of the cycle are development that leads to new technology and the transfer of that technology into production. Basic research can be regarded somewhat as one regards insurance—money-out-of-pocket with no return until you really need it. The declaration was made in February, 1977: It was called "Methodology (Basic Premises or Rules) for Measuring the Economic Effects of Using New Technology."⁴²

The new methodology may answer the question of how many rubles to spend on developing new technology, but it still leaves open the question of the effectiveness of rubles spent on science. According to

for Science and Technology alone there are more than 40 of these councils in which 5,500 scientists spend many hours. Of these, in 1975, 160 were Academicians of the USSR and of republic Academies. B.F. Zaitsev, "Struktura organov upravleniia nauko i tekhniko v usloviakh nauchno-tekhnicheskoi revoliutsii [Structure of the organization of management of science and technology under conditions of the scientific technical revolution], in *Organizatsiya upravleniya* (Moscow, 1975), p. 36.

⁴²"Methodology for Measuring the Economic Effect of New Technology," *Ekonomicheskaya Gazeta*, no. 10, March, 1977, pp. 11-14. For commentary on the text, see N.P. Fedorenko and D.S. Lvov, "Theoretical and Methodological Problems," *Ekonomika i Matematicheskiye Metody*, no. 4, July-August, 1977, pp. 621-630, translated in JPRS 69,890. Also see "New Standard Method for Computing Effectiveness of New Technology," *Sotsialisticheskaya Industriya*, no. 93, April 21, 1977, p. 2.

⁴³L. Glyazer, as quoted in Amann, *op. cit.*, p. 12.

⁴⁴B. Paton, "Increase the Potential of Science," *Trud*, August 6, 1977, p. 2.

⁴⁵Ye. I. Artemyev, and L.G. Kravets, *Inventions, Level of Technology, Control*, 2d ed., revised and expanded, *Ekonomika* (Moscow, 1977), 240 pp. See also Yampolskiy, *op. cit.*

⁴⁶B. Nazarov, "Need to Improve Quality of Inventions and Their Applications," *Sotsialisticheskaya Industriya*, no. 28, February 2, 1978, p. 2.

⁴⁷K.A. Yefimov, "Organizing the Development and Implementation Large-Scale Interbranch Scientific-Technical Programs," no source information given, translation in JPRS 64,010 in 1975.

⁴⁸V.A. Pokrovskiy, "Evaluating the Efficiency of Scientific and Technical Programs," *Izvestiya, Akademiya Nauk SSSR, Seriya Ekonomicheskaya*, no. 2, March-April 1977, pp. 60-68.

⁴⁹A. Ishlinskiy, "Economic Levers Urged for Speeding Implementation of New Technology," *Sotsialisticheskaya Industriya*, no. 13, January 15, 1978, p. 2.

⁵⁰See F.D. Holzman, *Financial Checks on Soviet Defense Expenditures* (Lexington, Mass: D.C. Heath, 1975), 104 pp., for a useful approach. As he states, state bank books would have to be open to the researcher.

Soviet economists, there are widely conflicting estimates, ranging from a gain of 28-31 kopeks or 23 to 35 percent to three to five times in gain to the economy for each ruble.⁴³ For example, the president of the Ukrainian Academy of Sciences said that one ruble invested in the Academy resulted in 5 rubles in return. During the ninth five year plan the 180 rubles budgeted to the Academy would have resulted in 900 million, in effect.⁴⁴

Not all research organizations are making that kind of claim. If it is possible for the Ukraine to multiply investment by 400 percent, it should be possible for all. Gosplan officials are looking for some way to bring this about, hopefully by means of government controls.⁴⁵

There are rules and procedures for evaluating research activity. For example, the document, "Procedures for Evaluating the Scientific-Technical Activity of Scientific Research, Planning and Design, and Design-Technological Organizations," calls for evaluating each research institute and design bureau in all aspects of its work every three years. But in the period 1975-1977, only 59 of 170 scheduled evaluations were conducted.⁴⁶ Individual large-scale scientific-technical programs undergo expert evaluation at the State Expert Evaluation Commission of the U.S.S.R. Gosplan. Smaller-scale programs are evaluated by experts in the State Committee for Science and Technology.⁴⁷

None of the rules and procedures seems to be applied sufficiently to allow for generalizations. An official of the State Committee for Science and Technology tackles this problem, using case studies from the machine-building industry.⁴⁸ A recent suggestion has been made by an Academician, chairman of the All Union Council of Scientific and Technical Societies, that the level of active participation of scientists in all stages of development and implementation following their discoveries should be included as one of the criteria for evaluating their work.⁴⁹

RESEARCH FUNDING

There are always problems when dealing with Soviet statistics. The method of reporting them officially changes; the base to which they relate shifts; there are always gaps that must be extrapolated. Moreover, many of the same security sensitivities that prevent a researcher from knowing what the Soviet defense budget really contains faces anyone trying to determine what the Soviet science budget really contains.⁵⁰

Once assembled, the figures seem to indicate that, despite its unprecedented growth, science now has a ceiling; or, if not an overall ceiling, then a concentration in particular areas accompanied by the neglect of others less amenable to central planning. Research in energy and agriculture, for example, may have very

few strings attached in the spending of funds, whereas pedestrian biological research may well be held down through inadequate funding and excessive accountability.⁵¹

Because there has been no attempt to rationalize Soviet statistics so that Soviet funding can be compared to that of other nations, no comparisons will be made, other than a general observation that, in the United States, the level of research and development support has declined as a percentage of the gross national product. From its 1969 peak, budgets for both industrial and government research have been reduced.⁵²

When we discuss budget figures we must keep in mind that the funds engendered that are assigned, through the banks, to research organizations via their superiors like the State Committee for Science and Technology (for complex programs), an academy, a university, or a ministry, are either grant or contract monies. But this is a one-way street. Chartered organizations, the academies and universities, cannot contract out research they have included in their plans; ministerial research facilities commonly contract out research assignments to the academies and educational facilities as well as to each other, even across ministerial boundaries.⁵³ In addition to the

⁵¹Hutchings, *op. cit.*, p. 60.

⁵²Harvey, *op. cit.*

⁵³Targets are set for academic organizations by the State Committee for Science and Technology as to how much contract research they should strive for. In 1968, it was 14.5 percent; since then, it is possible no upper limits have been set. Hutchings, *op. cit.* p. 83. It is probable that there is no big science possible in the academies without ministerial funding through contract research.

⁵⁴B.I. Gostev, "The Soviet Economic System," *Ekonomicheskaya Gazeta*, no. 46, 1977, pp. 7-8. The author is Head of the Department of Planning and Financial Bodies of the Central Committee of the Party. In 1975, Kudrov, *op. cit.*, gave the figure as 800 billion rubles.

⁵⁵N.I. Maslennikov, "On the State Plan for the Economic and Social Development of the USSR in 1978 and on the USSR Budget for 1978, and on the Implementation of the USSR State Budget for 1976," *Izvestiya*, December 16, 1977, p. 2., translation in JPRS 70,415. In 1976 revenues were 226 billion rubles. Note that budgets are finally totaled two years later.

⁵⁶Report of V.F. Garbuzov, Minister of Finance, *Pravda*, December 15, 1977, p. 4, translation in *CDSP*, vol. 29, no. 50.

⁵⁷"N.K. Baybakov, Chairman of Gosplan, Report," *Pravda*, December 15, 1977, p. 1, translation in *CDSP*, *ibid.* In his report, the figure of 4.7 percent was given for the growth of heavy industry, 7.7 percent for atomic power stations, and 16 percent for computers. There is to be an 11 percent increase over 1977 in scientific instruments, reported in N.K. Baybakov's "Speech to the Supreme Soviet," *Izvestiya*, December 17, 1977, p. 2, translation in JPRS 70,415. This far greater increase in equipping science than in staffing it was noted by V. Pokrovskiy, "The Effectiveness of Science and Technology," *op. cit.* For his report on the Five-Year Plan and the 1977 budget, see *Izvestiya*, October 28, 1976, translation in *CDSP*, vol. 28.

regular annual budgeted funds, there are special funds for development to supplement financing capital investments and acquiring scientific equipment that carried over from one budget period to the next and therefore may not be included in the annual national budget. Naturally, chances are very good that much of the spending for defense research in the academies and even in the ministries is not included in the budget figures. Therefore, the reader should keep in mind that the dispersal of rubles for science is more complicated than the simple budget figures presented below would indicate.

Figures given by the Soviets with regard to their total national wealth give some perspective on the budget figures. Excluding land and forests, the Soviets estimate their natural wealth at two trillion rubles, and their fixed productive capital at 870 billion rubles.⁵⁴

The national budget for 1978 is set at the following:⁵⁵

Revenue	—	246,365,456,000 rubles
Expenditure	—	246,134,956,000 rubles

Of these amounts the republic budgets totaled (a subtotal of the above):

Expenditure	—	109,700,000,000 rubles
-------------	---	------------------------

In 1978, the science budget is 19.1 billion rubles; this is a modest 4.1 percent higher than the 1977 figure. There are inflationary forces in the Soviet Union as well as in the rest of the world. To what extent this cuts into the 4.1 percent increase is not known. In any case, the rate of increase for science is greater than that for education, which is 3.4 percent higher in 1978 than in 1977, for a total of 4.9 billion rubles. Overall, the total expenditure is 3.1 percent higher in 1978 than in 1977. The total science and cultural budget, in which the science budget is a subtotal, is to show a 4.4 percent increase over 1977. Some 17.2 billion rubles are earmarked for defense in the 1978 budget, which is almost 2 billion less than for science.⁵⁶ As stated above, however, these figures are not the whole story. Their significance is that through the figures as publicized the leaders are determined to show their faith and support in science by making the budget read larger than that for defense.

Sources for the added expenditures on science, which are increasing at a greater rate than the overall economy or even education, are expected to come from science itself. Savings to the national economy during the ninth five year plan attributed to inventions and efficiency experts was 19.6 billion rubles. According to the chairman of USSR Gosplan, science and technology are to account for 4,000 new types of equipment in 1978, which will save the economy three billion rubles and one million workers. By the end of the second year of the tenth five year plan, the savings were to be six billion rubles and two million workers.⁵⁷

Therefore, the increase in the budget for science is well within the limits of its effectiveness. The overall expenditures on science, excluding capital investment, during the five year plan are to increase by 25 to 27 percent and are to exceed 85 billion rubles.

It has been pointed out by Western writers that the rate of increase in science expenditures has declined dramatically since the fall of Khrushchev in 1964. Between 1957 and 1965, the expenditures increased by 3.6 times or by an average of 17.4 percent annually. This was more than twice as fast as the national income was growing. Between 1965 and 1967, the annual rate dropped to 9 percent. In terms of the percentage of the total budget, spending on science rose from 1.22 percent in 1953 to 4.28 percent in 1964 in rather steady increments. In the last few years, 4.5 percent is close to the percentage, and this is probably going to be the trend.⁵⁸ Capital expenditures are not included in the science budget, and this could be where major spending must occur as the equipment for basic research gets more and more costly.

It is precisely because huge outlays for research equipment are expected to come out of ministerial budgets that the Soviet leaders are stressing the importance of science to the development and growth of all sectors of the economy administered by those ministries. The conviction of the industrial entrepreneurs that research and development can result in payoff, combined with additional incentives to introduce new technology and spend ministerial budget monies for basic research, will flesh out what is now merely policy. Conviction is the party's job, with the help of the scientific community speaking for itself; the incentives are the responsibility of the government. The machinery to produce sufficient scientific personnel has been proved already. The bureaucracy is expected to be innovative and labor productive, using the best computer programs possible. Given top-level management of high caliber with experience that spans science and industry, the Soviets hope to pull even, if not ahead, in the world technological race. ■

⁵⁸In 1976, for example, 17.7 billion rubles were spent on science. Pokrovskiy, "Managing the Effectiveness of Science and Technology," *op. cit.* According to the last source, the 1965 figure was 6.9 billion rubles. Interestingly, the amount spent on actual R&D, as opposed to the general term science, was figured out at 14.8-20.7 billion rubles based on the exchange rate of \$2.50-\$3.50=1 ruble. Cited in Amann, *op. cit.*, p. 27.

SOVIET MILITARY POLICY

(Continued from page 99)

turn to tactical innovation. In the next year or so the SAF will show how much it can repay these lavish expenditures and will demonstrate that air power at

large must be a major element in ensuring any Soviet success.

By the same token, even as it has accommodated a massive submarine program, the Soviet Navy can point to the diversification of its effort towards strategic attack, ASW (anti-submarine warfare) in the open oceans and anti-ship capabilities also in an open ocean frame. The KIEV-class aircraft carrier marks a radical departure in Soviet naval development, promoting a wide range of uses from escorting/protecting SSBN's to forming part of a naval task force for offshore operations, coupled with the steady deployment of KRESTA and KARA class guided-missile cruisers, a form of balanced navy but with a pronounced anti-ship capability enhanced even further by the deployment of the BACKFIRE bomber in an anti-ship role. Thus, while the Soviet SSBN's provide a form of strategic reserve (should it be needed), the Soviet Navy can contribute substantially to strategic attack missions on what passes for a global scale, plus a unique ocean surveillance and targeting capability developed by and for the Soviet Navy. That command and control/surveillance capability will probably come to be seen as Admiral S. G. Gorshkov's outstanding contribution to Soviet naval development, for all his comely ships.

As for coupling technology with military requirements, the Soviet command can view certain trends with satisfaction; in general, both weapons payload and range have been substantially improved, the ASW gap is still in favor of the United States but the Soviet Union is pressing ahead in very determined fashion, anti-tank guided munitions and air-to-surface munitions are approaching United States performance standards, Soviet anti-ship missiles now outstrip all others and, in armament norms (firepower), several Soviet systems, like helicopters, have an advantage. At the present time, however, the Soviet command is much preoccupied with developing the technology of data communications links⁵ and automated control of operational units (ASUV) to manage or match the mobility and firepower characteristics of all arms. In general, the Soviet command would argue that their doctrine is sound and their military technology adequate and in some spheres actually superior, but these two elements must be bonded with more advanced techniques of troop control, *upravlenie voiskami*—including the whole gamut of waging war effectively. It is that term—effectiveness—that not only subsumes many arguments but serves to divide the generations, a point for Brezhnev to ponder at some considerable length.

⁵One recent innovation is the introduction of the electronic surveillance/data relay version of the IL-18 (COOT) aircraft, liberally adorned with antennas, radios and equipment pods, the twin radomes on the top of the forward fuselage suggesting a data relay capability.

MILITARY PERSONALITIES

Periodically ill, Brezhnev is now 72 and must inevitably yield his place in the none too distant future. Some perception of that inevitability may have prompted the appointment of D. F. Ustinov (also a marshal by political elevation) to the post of Minister of Defense: this continued the representation of the armed forces on the Politburo without a major reshuffle after A. A. Grechko's death, even as it did not saddle any incoming regime with a mere youngster in his 50's. Ustinov's appointment also appears to have reflected the concern of the political leadership to be surrounded by military men, or men associated with the military with whom they are familiar. At the senior levels of the Ministry of Defense, many officers (Deputy Defense Ministers) have spent between seven and ten years in their posts; Admiral of the Fleet Gorshkov, reportedly not in good health, has outlasted all his fellows in length of service, both as C-in-C Soviet Navy and as a Deputy Defense Minister. While the demands of technology have forced a certain "rejuvenation" on and within the Soviet military command, notably within the Kulikov group,⁶ the older officers have shown marked resistance to handing over real control of the military apparatus, no doubt with Brezhnev's full cognizance.

In the course of a political succession, no civilian figure (like Ustinov) suggests himself as Minister of Defense: Marshal Ogarkov, Chief of the General Staff and an officer with wide experience of military-political and military-technical affairs, appears to be a likely candidate, leaving the General Staff post to be filled by a younger and able officer—this could be a surprise appointment indeed. There are two pointers: the Chief of the General Staff has usually been appointed from outside the General Staff and usually in association with the command of GSFG (Group of Soviet Forces in Germany), thus pinpointing Ivanovskii, the present C-in-CG/FG. On the other hand, General Kozlov (in his late 50's) and General Beletskii—both officers having associations with the SALT negotiations—could be promoted internally, that is, from within the General Staff; still another contender is General Gribkov, now Chief of Staff of the Warsaw Pact command, obviously an able officer. This assumes that Marshal Kulikov would remain as C-in-C/Warsaw Pact.

For all the paraphernalia of missiles and other

military gadgetry the Ground Forces maintain their curious hegemony: Army General Pavlovskii, now 69 years of age and in his post as C-in-C Ground Forces since 1967, cannot continue for much longer and could well be succeeded by General Petrov (First Deputy Commander and recently experienced in Soviet undertakings in Ethiopia), before which he was Commander of the Far Eastern District as was Pavlovskii himself. Petrov could be superseded, however, by General Treyak, now in command of the Far Eastern Military District.

Other prominent candidates are General Ivanovskii (C-in-C GSFG) and General Mayorov (Commander/Baltic Military District), though the latter may well be seen as a future Chief of Staff/Ground Forces. Nor, understandably, is the Soviet Army short of armored experts, including Losik, Varennikov (Commander/Carpathian Military District) and Ivanov (latterly C-in-C/Soviet forces in Hungary, Southern Group).⁷ The airborne command in control of an arm that is increasingly prominent in Soviet thinking must soon be rejuvenated to replace General Margelov: General Tankayev (formerly Deputy Commander/Airborne Forces 1965-1969) and General Kulishev (head of the Ryazan Higher Airborne Military School) must figure in any command change.

That astonishing phenomenon, Admiral of the Fleet Gorshkov, naval C-in-C since 1956, cannot continue forever, appearances notwithstanding! He was reportedly in ill health some time ago and stayed on only at Brezhnev's personal request. An obvious contender for the post of naval C-in-C is the present First Deputy C-in-C, Admiral of the Fleet N.I. Smirnov, four years in this position and formerly Pacific Fleet commander, now just over 60 years of age, whose reputation rests on his tactical expertise. What will be interesting to observe in the coming command changes hinges on the types of balance struck—between active fleet command experience and administrative background, between planners and operational-tactical experts and between surface-ship men and submariners.

One very significant recent appointment was that of Admiral of the Fleet G.M. Yegorov (formerly Northern Fleet commander) as Chief of the Main Naval Staff, thus introducing a senior officer from a major fleet command (unlike his predecessor Admiral Sergeyev who was essentially a staff man without major fleet command experience, for all his wartime service in motor torpedo boats). Nor can Yegorov be dismissed too easily as a serious contender for the post of Soviet Navy C-in-C. Meanwhile, Admiral Amelko has replaced Admiral Lobov (who died in July, 1977, and was the naval assistant on the General Staff), and Admiral Kosov (C-in-C Baltic Fleet since 1975) has taken over Amelko's post as Deputy Commander/Soviet Navy.

⁶I suppose that it is justified to refer to the "Kulikov group," officers who served with Kulikov when he was commander in charge of GSFG (like Varennikov, or Govorov) or who were brought into the General Staff when Kulikov himself became Chief of the General Staff.

⁷Marshal Babadzhanian, the former commander of Soviet armored forces, died in November, 1977, after holding this post since 1969. The new commander is Colonel General Yuri Potapov.

Looking at the Soviet Air Force, there are some striking contrasts with the Soviet Navy. Admiral of the Fleet Gorshkov has been personally identified with the formulation, introduction and implementation of a specific naval policy and the development of a suitable fleet to go with it, while Air Chief Marshal Kutakhov (SAF C-in-C, now in his mid-60's) has largely managed a modernization program conceived before him, though this management effort has been no mean feat. His most likely successor is his own First Deputy Commander, Air Marshal Yefimov, ten years younger than Kutakhov. In other words, a change in command here would mean little or no alteration in policy, particularly since other key posts (commander of Long-Range Aviation, SAF Chief of Staff, for example) have already been rejuvenated.

Much the same might also be said for the Strategic Missile Forces, where the present C-in-C General Tolubko—avowedly no missile expert—could be replaced by his own First Deputy, Colonel General Grigoriev, though previous practice has been to import a C-in-C from the Ground Forces (as was the case with Moskalenko, Krylov and Tolubko himself). However, the demand for real technical expertise could change this pattern, much as it has done with the high command of the Air Defense Command (PVO Strany), where Marshal Batitskii, long reported to be in indifferent health, has yielded pride of place to his own First Deputy C-in-C, Colonel General Koldunov, an air force officer who commanded the key Moscow Air Defense District from 1970 to 1975. In the struggle between the missile men and the air component within the Air Defense Command, the Air Force officers have made a comeback.

The making of a new high command elite can also be discerned within the senior officers of the Groups of Soviet Forces abroad and those holding commands in key military districts. Such officers will proceed to Ministry of Defense posts, the General Staff and possibly to the Strategic Missile Forces. The Far Eastern pressure group still holds powerful sway in the Ground Forces and this could bring General Tretyak (GOC Far Eastern MD) into higher command posts: General Zaitsev, GOC Belorussian MD, holds a key military district command and one usually

associated with fast preferment. Army General Ivanovskii, commander of GSFG, has held his command for six years and must soon move to a central ministry appointment; General Mayorov in the Baltic Military District also seems to be marked out for a central senior post. V.L. Govorov, son of the distinguished wartime marshal, could well succeed Ivanovskii in Germany—thus confirming yet another military dynasty within the Soviet armed forces. Other rising commanders to be noted are Varennikov (also the son of a prominent wartime commander), Gerasimov (GOC Kiev MD, a well-established jumping off point) and General Gribkov (Warsaw Pact Chief of Staff), all backed by a substantial echelon of military district commanders and chiefs of staff in the internal Soviet military districts.⁸

From this most rudimentary outline it will be seen that there is no single pattern in recent and projected command changes: some have their own inevitability (death or disablement), others reflect the need for more pronounced and precise military expertise, and there is undoubtedly a steady influx of technically qualified officers into high command positions. Nor is it possible to forget the Main Political Administration (MPA), whose current chief Army General Yepishev (in this office since 1962) will be retained until the bitter end and then replaced by his First Deputy (Sredin), though much may depend on the taste and requirements of a successor regime. Equally, the chief of the Navy's political administration (Admiral Grishanov) has an extraordinary record of longevity in his post—20 years—and must soon step down. Demonstrably, the more elderly command group has held the levers of policy and influence, and this has been more or less what Brezhnev wanted.

But what of the future—will party patronage or professional competence be the real arbiter of advancement to high command appointments? Under any new regime, party patronage will probably hold sway when the new leadership selects its military nominees, implementing the previous bargain fashioned from party support for major defense programs in return for military acceptance of overt political control. Nonetheless, new problems in defense will require new solutions, and new men will proffer them.

It is unlikely that the Soviet economic slowdown will induce any major changes in Soviet defense policy. But the military's managerial ambitions might embarrass any new leadership. And within the military the implications of Soviet demographic trends could intensify the drive for technological solutions and thus induce a collision with the party, which is aware of the political dangers in technology-intensive solutions. Some time ago, Marshal Kulikov hinted at the need for a new look at defense policies and defense decision-making.⁹ The same pride in Soviet superpower status will be manifested, but there may be less

⁸This second echelon of commanders includes Voloshin (Odessa MD), Belikov (N. Caucasus MD), Lushev (Volga MD), as well as the numerous first deputy commanders and chiefs of staff within the southern and hinterland MD's; there is some evidence of a cycle of appointments which takes senior officers from the command of formations (armies) to MD appointments and then—if their abilities are proved—into the central military apparatus.

⁹See General (now Marshal) V. Kulikov, "Sovetskaya voennaya nauka sevodnya," *Kommunist*, no. 7, May, 1976, pp. 38-47, pointing out shortcomings in tactical performance and also the dangers of too much rigidity in the appreciation of possible strategic threats.

of the current paranoia, which cannot distinguish between threats real and threats imagined, not to mention the magnification of mere slights.

The military-political blueprint that the Soviet military offers to Brezhnev may also serve the interests of any successor regime; the underlying assumption (shared by many Western analysts) is that there will be no appreciable change in the nature of any successor regime (indeed, the ailing, aging Brezhnev government is doing all it can to ensure just this outcome). An upward trend in the allocation of resources to defense is an inevitable prospect through the 1980's. Neither economic slowdown nor demographic vagaries can be allowed to interfere with the current and projected military programs, hence the military's interest in greater managerial sway in Soviet society at large. The arguments for continued momentum are persuasive in the extreme, combining military necessity with political advantage. Although there is much loose talk about a Soviet push towards global hegemony—whatever that means—the Soviet military will presumably argue more cogently that the past decade has produced a new military-political environment in which the strategic encirclement of the Soviet Union has been finally shattered (thus providing particular conditions for détente as an *irreversible* process), that the strategic encirclement of the People's Republic of China is proceeding apace, and that a land-link is being forged with Africa, which presents the Soviet Union with military, political and economic advantages. Along the crucial southeastern axis, there is a real possibility that the Soviet Union will eventually control the Straits of Hormuz, thus deflecting that source of regional oil supply from the West and in the direction of the Soviet Union. The military support of any thrust to the south—even against Iran—is already much improved. And it is not for nothing that the Trans-Caucasus Military District can muster 2,130 tanks in the immediate order of battle. These "southerly" Military Districts, including the Odessa MD, are no longer peaceful backwaters but form the bases for the logistical and operational support of high-speed, extra-peripheral intervention forces, all facilitated by the exploitation of land, sea and air bridges.

What is undoubtedly emerging is a new pattern of links between European Russia and the Soviet Far East, long a Russian and Soviet Achilles' heel. Thus Soviet naval interest in the Indian Ocean will intensify, if only to prevent the use of that ocean as a *place d'armes* by United States SSBN's; by the same token, the Soviet Navy's investment in the Pacific will increase. Signs of this are already apparent. Any breakthrough via Baluchistan to the Indian Ocean would serve a multitude of purposes, not the least of which would be the tighter naval encirclement of China and the promotion of Soviet links with Africa.

Meanwhile, in a policy not without its own risks and occasional contradictions, the Soviet Union is penetrating Southern Yemen, Ethiopia and Afghanistan.

In the evolution of this Eurasian strategy, the Soviet military can thus point to a certain stabilization in the West (Europe), consolidation and build-up in the East (vis-à-vis China) and penetration to the south. It is still legitimate for Soviet military and political leaders to regard these as a series of defense moves, to break encircling rings and combinations. Soviet leaders also maintain that the class struggle has been transferred to a global arena and that Soviet help will be forthcoming for national liberation struggles. Marshal Grechko adumbrated that mission in military-political terms some time ago—somewhat prematurely, as it proved. The Soviet General Staff has also given this strategic objective close study and attention, involving as it does non-Soviet Warsaw Pact troop and security elements as well as Soviet units—all belying the notion that Soviet forces are not deployed outside the Warsaw Pact.

Though not entirely averse to the regime's show of *Schreckpolitik* and sometimes even aiding this process of intimidation, the Soviet military must be aware that this is not the real issue. There are major strategic problems to be solved: the evolution of the central relationship with the United States, the maintenance of a highly modernized, combat-ready force deployed forward in east-central Europe—capable of implementing a high speed offensive, even to the point of preemption, reinforcing all means of a conventional suppression of NATO's (the North Atlantic Treaty Organization) defensive systems and expanding tactical nuclear war-fighting capabilities—as well as configuring forces for operations in the Far East. The combined arms approach will demand further diversification. There will be steady improvement in nuclear capability/nuclear war-fighting capacity for theater forces, the maintenance of superiority in conventional weapons and strengths, enhanced mobility, greater emphasis on surprise and deception, the augmentation of resources at the periphery and the enlargement of a central reserve for two-front operations, coupled with modernization of battle management/command and control systems. In brief, this will be a quest for identifiable advantage for greater "effectiveness" and sustained combat capability and viable battle management systems.

"Global hegemony" has a nice ring to it, but the Soviet command faces more urgent tasks. Certainly, Soviet leaders will insist on having the means to impose the *droit de seigneur* that derives from super-power status. They will understand détente as a means to manage any dangerous collision that might induce nuclear war, but the search will continue for the means to "win" any war at any level of weapons. ■

THE MONTH IN REVIEW

A Current History chronology covering the most important events of August, 1978, to provide a day-by-day summary of world affairs.

INTERNATIONAL

Association of Southeast Asian Nations (ASEAN)

Aug. 3—In Washington, D.C., the members of the Association of Southeast Asian Nations—the Philippines, Malaysia, Indonesia, Singapore and Thailand—open talks with U.S. administration officials on economic and political issues.

Middle East

(See also *Israel; Lebanon; U.S., Foreign Policy*)

Aug. 2—It is reported that Saudi Arabian officials have told U.S. special envoy for the Middle East Alfred Atherton, Jr., that because of Israeli “intransigence” the efforts of Egyptian President Anwar Sadat to negotiate directly with Israel cannot succeed.

Aug. 4—Just before he leaves for the Middle East, U.S. Secretary of State Cyrus Vance tells the House International Relations Committee that the U.S. is prepared to mediate the Middle East impasse by advancing “suggestions to overcome obstacles, to bridge the gaps and get negotiations back on the track.”

Aug. 8—White House press secretary Jody Powell announces that Egyptian President Anwar Sadat, Israeli Prime Minister Menahem Begin and U.S. President Jimmy Carter will meet at Camp David, Maryland, to discuss a Middle East peace settlement; the Israeli and Egyptian leaders have agreed to the meeting, which will be of undetermined length.

Egyptian President Sadat says that he has agreed to the Camp David meeting because the U.S. has become a “full partner” in the negotiations.

The U.N. peace-keeping force commander in Lebanon, Major General Emmanuel Erskine, urges Israel to use her “influence” to halt the shelling of U.N. and Lebanese Army troops by Lebanese Christian militias in southern Lebanon.

Aug. 20—Israeli Prime Minister Menahem Begin says he will make a “concrete project” aimed at a partial Middle East peace at the Camp David meeting starting September 5.

Aug. 27—After a Cabinet meeting, Israeli Prime Minister Begin says that Israel will offer no changes in her peace plan at the Camp David meeting in September.

Aug. 30—Commenting on U.S. President Jimmy Carter’s purported offer to deploy U.S. forces on the West Bank of the Jordan and in the Gaza Strip, Israeli Foreign Ministry officials say that Israeli forces must remain in the occupied territories.

Organization of Petroleum Exporting Countries (OPEC)

Aug. 21—The *Middle East Economic Survey* reports that, according to Saudi Arabian Oil Minister Sheik Ahmed Yaki Yamani, Saudi Arabia will ask for a series of gradual price increases in the cost of crude oil this year rather than one large increase in order to avoid devastating effects on the world economy.

United Nations

(See also *Middle East; Namibia*)

Aug. 21—The United Nations Law of the Sea Conference opens its 7th session in New York. The 1st session opened in 1973.

Aug. 30—In a report to the Security Council, Secretary General Kurt Waldheim asks the Council to provide 7,500 troops and 1,200 civilian officials for a peace-keeping unit to oversee Namibia’s (South-West Africa) transition to independence from South Africa.

AFGHANISTAN

Aug. 3—In Washington, D.C., a State Department official reports that the new Afghanistan government has requested an increase in U.S. aid.

Aug. 17—Defense Minister Brigadier General Abdel Qadir and Army Chief Lieutenant General Shapur are arrested for their part in an unsuccessful coup d’état.

ARGENTINA

Aug. 1—It is reported that on July 31 Jorge Rafael Videla retired as Commander in Chief of the Armed Forces and assumed the post of President. General Roberto Viola succeeds him as army chief.

Admiral Armando Lambruschini’s daughter is killed when a bomb explodes at his home. Lambruschini is scheduled to become Commander in Chief of the Navy on September 15 when Admiral Emilio Massera retires.

AUSTRALIA

Aug. 7—Reginald G. Withers, Minister for Administrative Services, is dismissed from his Cabinet post by Prime Minister Malcolm Fraser. Withers is accused of using illegal influence to determine electoral boundaries in Queensland.

Aug. 15—Prime Minister Fraser presents his budget to Parliament, thus completing his plan to dismantle the social welfare system introduced by the Labor government of Prime Minister Gough Whitlam.

Aug. 25—The government reaches an agreement with aboriginal landowners that guarantees minimum rights to the landowners when the government mines uranium on their land.

Aug. 31—Foreign Minister Andrew Peacock refuses former U.S. President Richard M. Nixon’s request that Australia allow him to make an official visit.

BRAZIL

Aug. 25—Retired General Euler Bentes Monteiro is selected by the Brazilian Democratic Movement (MDB) to oppose the government’s candidate, General Joao Baptista de Figueiredo, in the October election.

CAMBODIA

(See also *U.S., Foreign Policy*)

Aug. 31—A spokesman says government forces have destroyed 2 Vietnamese regiments in the border province of Svay Rieng in recent weeks.

CANADA

- Aug. 2—In Ottawa, Prime Minister Pierre Elliott Trudeau announces plans for a \$2-billion cut in government spending and a reduction in taxes.
- Aug. 3—Queen Elizabeth II officiates at the opening of the Commonwealth Games in Edmonton.
- Aug. 25—A strike by the International Association of Machinists forces Air Canada to suspend its airline operations worldwide.

CHAD

- Aug. 29—A new national charter goes into effect; former rebel leader Hissen Habre is named Premier.

CHILE

(See also *U.S., Administration*)

- Aug. 2—President Augusto Pinochet announces that General Manuel Contreras Sepulveda, former head of the National Directorate of Intelligence (DINA), and 2 other officers are currently being detained by the government at the request of the U.S. embassy. They are awaiting possible extradition to the U.S. to be tried for their involvement in the murder of former Chilean Ambassador to the U.S. Orlando Letelier.

CHINA

(See also *Vietnam*)

- Aug. 9—The governments of China and Libya establish diplomatic relations.
- Aug. 12—In Peking, Japanese Foreign Minister Sunao Sonoda and Chinese Foreign Minister Huang Hua sign a 10-year peace and friendship treaty, including a clause opposing hegemonism.
- In Moscow, Tass, the government news agency, says the Sino-Japanese treaty endangers détente and threatens security in Asia.
- Aug. 16—In Romania, Premier Hua Kuo-feng arrives for a 5-day state visit; this is his first European trip since he became Premier.
- Aug. 18—In Bucharest, Chairman Hua warns the Soviets that they "will be turned to dust under the iron blows of the people."
- Aug. 22—In Peking, the government accuses the Soviet Union of planning to build "a nuclear base" close to China's border near Japan.
- Chairman Hua arrives in Belgrade, Yugoslavia, and is greeted by Yugoslav President Tito.
- Aug. 24—In Tokyo, representatives from Taiwan and China attend the 19th International Conference on High-Energy Physics; this is the first time delegates from both countries have attended the same meeting.
- Aug. 29—Chairman Hua arrives in Teheran for a 3-day state visit; he is the 1st Chinese Communist party leader to visit a non-Communist country.
- Aug. 31—In Teheran, Chairman Hua and Iranian Shah Riza Pahlevi sign a cultural exchange agreement.

CUBA

- Aug. 31—U.S. Attorney General Griffin Bell announces that the Cuban government has offered to release hundreds of U.S. citizens being held in Cuban jails as political prisoners.

DENMARK

- Aug. 31—The coalition government of Social Democrats and Liberals submits legislation to Parliament calling for a tax increase and a wage freeze; 6,000 workers strike to protest the proposals.

DOMINICAN REPUBLIC

- Aug. 16—In Santo Domingo, Antonio Guzmán is sworn in as President to succeed Joaquin Balaguer.

EGYPT

(See *Intl. Middle East; U.S., Foreign Policy*)

ETHIOPIA

- Aug. 6—Government forces continue their advance around Asmara, the Eritrean capital; they have captured 27 towns since they took Asmara from the secessionists on July 28.

FRANCE

(See *Pakistan*)

HONDURAS

- Aug. 7—It is announced on national radio that the government of President Juan Alberto Melgar Castro has been overthrown in a bloodless coup d'état by three army generals, General Policarpo Paz Garcia, Commander in Chief of the armed forces, General Domingo Alvarez, air force commander, and Lieutenant General Amilcar Celaya, commander of the national police.
- Aug. 8—The new military junta issues a statement promising to hold the scheduled free elections in 1980.

ICELAND

- Aug. 31—The Progressive party forms a coalition government with Social Democrats and Communists; each of the parties will hold 3 Cabinet posts. The country has been without a governing party since the June 25 elections.

INDIA

- Aug. 6—In Geneva, the U.S. government and the Indian government reach an agreement on reducing U.S. import duties on Indian products in exchange for an easing of Indian procedures on imports of U.S. products.
- Aug. 8—Prime Minister Morarji R. Desai says that he is "concerned at the very low performance" of India's birth-control program.
- Aug. 10—The lower house of Parliament passes a measure to limit the government's power to declare a state of emergency to wartime or rebellion.
- Aug. 23—In New Delhi, Former Prime Minister Indira Gandhi is released on bail; she is charged with criminally conspiring to acquire jeeps for her 1977 political campaign.
- Aug. 26—In 3 agreements totaling \$60 million, the U.S. resumes direct aid to India. Aid was suspended in 1971 after the outbreak of fighting in what is now Bangladesh.
- Aug. 30—In New Delhi, about 2,000 farmers protesting the government's policy of leasing land to "untouchables" are arrested outside Parliament.

IRAN

(See also *China*)

- Aug. 5—Shah Mohammed Riza Pahlevi endorses the plan for holding national parliamentary elections in June, 1979.
- Aug. 19—In a speech on the 25th anniversary of his government, the Shah says that the recent demonstrations against his government have been instigated by "rioters [who] receive orders from the Communists" and that the plot is "to turn Iran into an 'Iranestan'."
- Aug. 21—In Abadan, arsonists set fire to a theater, killing at least 377 people.

Aug. 22—Police arrest 10 people in connection with the theater fire; they are believed to be ultra-conservative Muslims who believe that the Westernization of Iran conflicts with the teachings of the Koran.

In Abadan, demonstrations break out against the government and the Shah, whom the demonstrators blame for the holocaust because the fire fighters delayed in reaching the scene.

Aug. 23—Government troops arrive in Abadan to maintain order following the outbreak of violence during the demonstrations yesterday.

Aug. 27—Prime Minister Jamshid Amouzegar resigns.

In an attempt to stem Muslim criticism of his liberalization measures, Shah Pahlevi names Jaafer Sharif-Emami to succeed Prime Minister Amouzegar.

Sharif-Emami appoints a 22-member Cabinet that includes the newly created ministry of religious affairs.

Sharif-Emami announces a series of reforms, including the lifting of the ban on political parties, in an attempt to appease conservative Muslim leaders. He orders all gambling houses in the country closed.

IRAQ

(See also *Lebanon*)

Aug. 2—In Karachi, 2 terrorists from Southern Yemen attack Iraqi officials entering the Iraqi Consulate General; 2 people are wounded. Police kill one terrorist and arrest the other.

Aug. 3—In Paris, the PLO's (Palestine Liberation Organization) chief delegate in France, Ezzedine Kalak, and his aide are killed in their offices by terrorists who are thought to belong to an Iraqi extremist group.

ISRAEL

(See also *Intl, Middle East; U.S., Foreign Policy*)

Aug. 8—Prime Minister Menahem Begin accepts U.S. President Jimmy Carter's invitation to attend peace talks with Egyptian President Anwar Sadat in the U.S.

Aug. 14—It is announced that the Ministerial Committee on Security has approved the establishment of 5 new military settlements on the Israeli-occupied West Bank of the Jordan River.

Shortly after the announcement about the settlements, the Cabinet suspends plans for the settlements.

Aug. 21—In London, terrorists attack an Israeli El Al airline bus, killing 2 people and injuring 8.

Aug. 22—In Beirut, Israeli jets bomb a Palestinian refugee camp in reprisal for yesterday's attack on an El Al bus in London. 5 Palestinian guerrillas are reported killed.

Aug. 24—In protest over Begin's Middle East policies, 5 members of the Democratic Movement for Change, a partner in the coalition government, refuse to support the government in the Knesset.

JAPAN

(See *China*)

KENYA

Aug. 22—President Jomo Kenyatta dies in his sleep; Vice President Daniel Arap Moi is sworn in as acting President. Kenyatta was President for 15 years, ever since Kenya gained independence.

KOREA, SOUTH

(See *U.S., Political Scandal*)

LAOS

Aug. 22—In retaliation for the expulsion order for all French embassy personnel from Vientiane, France

breaks diplomatic relations with her former colony.

Aug. 26—In Vientiane, the government returns to American officials the bodies of 4 U.S. servicemen killed in the Indochina War. This is the 1st time the Laotian government has made such a gesture.

LEBANON

Aug. 1—The government accuses Israel of hindering the deployment of regular army units in southern Lebanon; yesterday, Lebanese troops attempted to reach outposts in southern Lebanon but were held back by artillery fire from the Israeli side of the border.

Aug. 3—In Beirut, Syrian Foreign Minister Abdel Halim Khaddam says that his government will support Lebanon's deployment of troops in the south.

Aug. 10—A cease-fire between Syrian troops and Christian militiamen goes into effect in northern Lebanon.

Aug. 14—In Beirut, the headquarters of the Iraq-supported Palestine Liberation Front is destroyed by a bomb; 98 people are reported killed.

Prime Minister Salim el Hoss says that he is disappointed in the U.S. because it has not lived up to its promises to help expedite the deployment of Lebanese Army troops in south Lebanon.

Aug. 26—Fighting erupts between Christians and Syrians in the Batroun region in northern Lebanon.

LIBYA

(See *China*)

MEXICO

Aug. 31—The body of Hugo Margain Charles, the son of Mexico's ambassador to the U.S., is found; Margain was kidnapped August 29 by terrorists who claim to be members of the illegal League of September 23.

NAMIBIA (South-West Africa)

(See also *Intl, U.N.; Zambia*)

Aug. 22—In Windhoek, U.N. special representative Martti Ahtisaari completes a 16-day mission to pave the way for independence. 50 members of the U.N. Transitional Assistance Group will remain.

NICARAGUA

Aug. 22—In Managua, about 20 left-wing terrorists attack the National Palace and take an estimated 500 people hostage, including the son of President Anastasio Somoza Debayle.

The terrorists, who belong to the Sandinista Liberation Front, demand the release of all political prisoners, safe conduct for themselves and the released prisoners from the country, and \$10 million in cash.

Aug. 24—President Anastasio Somoza agrees in part to the terrorists' demands; the terrorists and released prisoners fly out of Managua in several planes to Panama after releasing more than 1,000 hostages from the capitol. Somoza paid \$500,000 in ransom and released the political prisoners.

Aug. 25—Anti-government leader Rafael Cordova asks businessmen to close down to demand President Somoza's resignation.

Aug. 28—In Managua, a spokesman for the National Guard says that a conspiracy by army members and officials to overthrow President Somoza has been uncovered; 12 officers and 73 National Guardsmen have been arrested.

The Chamber of Deputies approves a bill to permit President Somoza to leave the country.

Aug. 29—In Managua, business comes to a standstill when businessmen close down; their strike is reportedly spreading to outlying areas.

Despite growing pressures for his resignation, Somoza declares that he will remain in office until the end of his term in 1981.

In Matagalpa, a town north of Managua, air force planes strafe anti-government rebels; 4 people are reported killed.

Aug. 30—In Managua, fighting breaks out between demonstrators and police.

NIGERIA (See Rhodesia)

PAKISTAN

Aug. 23—General Mohammed Zia al Haq, chief martial law administrator, swears in an all-civilian Cabinet. He says general elections will be held by October, 1979.

General Zia says that France has withdrawn her offer to sell Pakistan a nuclear reprocessing plant.

PERU

Aug. 23—The government declares a state of emergency and sends government troops to the copper mining areas to protect miners who wish to work; about 50,000 miners have been on strike for the last 3 weeks. They are demanding the reinstatement of union leaders who were fired after previous strikes.

PORTUGAL

Aug. 1—President António Ramalho Eanes threatens to call new general elections by the end of 1978 if political leaders fail to form a coalition government by August 6.

Aug. 28—President Eanes formally appoints Alfredo Nobre da Costa as Prime Minister. Nobre da Costa submits the names of his newly appointed 15-member Cabinet to the President.

RHODESIA

Aug. 8—The Executive Council of the transitional government announces a series of measures to end discrimination in public facilities; no mention is made of ending the segregated school and hospital systems.

Aug. 19—In Lusaka, Nigerian Foreign Minister Joseph Garba meets with Rhodesian nationalist Patriotic Front co-leaders Robert Mugabe and Joshua Nkomo to discuss the proposed plan to keep a U.N. peace-keeping force in Rhodesia in exchange for the Patriotic Front's acceptance of the basic principles of the British-U.S. peace proposals.

Aug. 20—In a nationwide television address, Prime Minister Ian Smith says that he is willing to attend an all-party conference on Rhodesia if the Patriotic Front refrains from demanding the dismantling of Rhodesia's security forces.

Following Smith's address, Mugabe and Nkomo reject Smith's demands that the security forces remain intact; they demand a Rhodesian army based on Patriotic Front forces.

Aug. 29—A spokesman for the Patriotic Front says that black majority rule is impossible this year; he claims that once an agreement is reached it will take at least 6 months to prepare for free elections and the transfer of power. Rhodesia is scheduled to achieve majority rule by December 31, 1978.

Aug. 30—Reverend Ndabaningi Sithole rejects a U.S.-British request for an all-party conference on the future of Rhodesia.

ROMANIA (See China)

SAUDI ARABIA (See also Intl. OPEC)

Aug. 13—Crown Prince Fahd gives his support to the upcoming conference on the Middle East in the U.S.

SOUTH AFRICA (See Intl. U.N.; Zambia)

SPAIN

Aug. 21—The government grants the Basque General Council regional autonomy over agriculture, industry, commerce, and town planning.

Aug. 28—In 4 separate incidents, 4 policemen are killed by terrorists.

SRI LANKA

Aug. 1—An official inquiry begins into the government of Prime Minister Sirimavo Bandaranaike. The government of Prime Minister Junius Jayewardene has accused the Bandaranaike government of misuse and abuse of power, and of corruption, fraud and nepotism.

SYRIA (See Lebanon)

TAIWAN (See China)

TURKEY (See U.S., Foreign Policy)

U.S.S.R. (See also China; U.S., Foreign Policy)

Aug. 2—Aboard Salyut 6, Colonel Vladimir Kovalenok and Alexander Ivanchenkov surpass the U.S. record of 937 astronaut days in space.

Aug. 3—A Moscow City Court fines U.S. journalists Craig R. Whitney of *The New York Times* and Harold D. Piper of *The Baltimore Sun* \$72.50 each for failing to publish retractions of articles they wrote about a Soviet dissident.

Aug. 23—It is reported that the visit of Deputy Foreign Minister Kikolai Firyubin to Japan planned later this month has been canceled.

Aug. 25—The Soviet Foreign Ministry issues formal warnings to the 2 U.S. journalists but does not revoke their accreditation. The reporters' newspapers paid \$3,570 in fines and court costs.

UNITED KINGDOM

Great Britain

Aug. 4—Jeremy Thorpe, a former leader of the Liberal party and a member of Parliament, is arrested and charged with conspiring to murder Norman Scott, a male model. Scott had accused Thorpe of engaging in homosexual relations with him. In May, 1976, Thorpe resigned as Liberal party leader because of those accusations.

UNITED STATES

Administration

Aug. 1—Presidential assistant Margaret Costanza resigns. A federal grand jury in Washington, D.C., indicts 7 people, including General Juan Manuel Contreras

Sepulveda (the former head of Chile's National Directorate of Intelligence [DINA]), in the car bomb explosion that killed Orlando Letelier and his secretary on September 21, 1976, in Washington, D.C.; Letelier served as Chilean Ambassador to the U.S. in the administration of Chilean President Salvador Allende Gossens.

Aug. 3—Appearing at a town meeting in Fairfax, Virginia, President Jimmy Carter discusses his proposed changes in the Civil Service system, saying that his reforms will "reward dedication and excellence."

In its annual report, the Veterans' Administration says it spent \$18.6 billion on veterans' programs in the last 12 months.

Aug. 4—The Environmental Protection Agency approves the ocean-cooling system for the proposed Seabrook, New Hampshire, nuclear power plant; the system has been opposed by environmentalists.

Aug. 5—Federal Bureau of Investigation director William Webster names Neil J. Welch as an assistant director in charge of the FBI's New York office, succeeding J. Wallace LaPrade, who was dismissed by Attorney General Griffin Bell in July.

Aug. 11—A 3-year Massachusetts Institute of Technology study ordered by the Food and Drug Administration reports that food preservatives using nitrites appear to cause cancer in animals and may do so in humans; an FDA announcement says that the government has not yet decided what action to take because of the effectiveness of nitrite compounds in preventing botulism.

Aug. 14—The House Assassinations Committee opens public hearings on the assassinations of President John Kennedy and civil rights leader Martin Luther King, Jr.

Aug. 19—President Jimmy Carter names Stanford Ross to head the Social Security Administration.

Aug. 22—President Jimmy Carter, his wife Rosalynn, and their daughter Amy begin a raft trip vacation down Idaho's Salmon River.

Aug. 25—The administrator of the General Services Administration, Jay Solomon, directs the GSA to purchase items from retail outlets if such items are available at prices lower than their price under standard procurement procedures.

Aug. 27—Chief economist for the House Budget Committee Nancy Teeters is nominated by President Jimmy Carter to be the first woman member of the Federal Reserve Board.

Aug. 30—President Jimmy Carter returns early to Washington, D.C., from his Western vacation in order to help to persuade Congress to pass his long-stalled energy bill.

General Services Administrator Jay Solomon says that he expects "50 indictments of G.S.A. employees, contractors and suppliers in the next few months" on charges of fraud and bribery.

Aug. 31—President Jimmy Carter notifies Congress that the October federal and military pay increase, affecting 3.5 million federal employees, will be held to 5.5 percent. Congress has 30 days to override the plan; in case of an override in either House, the workers involved would receive the 8.4 percent raise suggested by a presidential advisory panel.

White House press secretary Jody Powell says that Texas attorney Sarah Weddington has been appointed assistant to the President handling women's issues.

Civil Rights

Aug. 24—U.S. district court Judge Aubrey Robinson orders the Defense Department to advise some 40,000 persons who hold less than honorable discharges and

who applied to upgrade their discharges between April and October, 1977, in President Jimmy Carter's special review program that they can continue their appeals.

Aug. 30—The New Jersey Supreme Court, by a 7 to 0 vote, assumes jurisdiction over the contempt charges against *The New York Times* and its reporter, M. A. Farber; it releases Farber from jail and stays the fines against the *Times* until the court hears their appeals September 5.

Economy

Aug. 4—The Labor Department reports that unemployment rose to 6.2 percent of the labor force in July.

Aug. 10—The Labor Department reports that its wholesale price index rose 0.5 percent in July.

Aug. 19—Treasury Secretary W. Michael Blumenthal meets in Florida with Saudi Arabian Finance Minister Mohammed Abalkhail to discuss U.S. plans for strengthening the dollar.

Aug. 21—The Commerce Department issues a revised economic growth rate figure of 8 percent for the 2d quarter of 1978.

Aug. 22—The Treasury Department announces that starting in November it will increase its monthly gold sales to 750,000 ounces.

Aug. 29—The Department of Labor reports that the consumer price index rose 0.5 percent in July.

The Commerce Department reports that the U.S. balance of trade showed a \$2.986-billion deficit in July.

Aug. 30—The dollar continues to decline against foreign currencies; it closes in Tokyo at 189.707 yen to the dollar. In January, 1977, the yen was 292 to the dollar.

Major U.S. banks raise their prime interest rate to 9.25 percent, the highest rate since February, 1975.

Aug. 31—The Commerce Department reports that its index of leading economic indicators fell 0.7 percent in July.

Foreign Policy

(See also *Intl. Middle East; India; Laos; U.S.S.R.*)

Aug. 9—The Department of Commerce issues an export license for an elaborate computer-run welding machine to be sold to the U.S.S.R.; the machine is part of a \$144-million machinery deal to produce oil drilling equipment.

Aug. 14—The Department of Defense has informed Congress that it plans to sell \$192-million worth of cannons to Iran; Congress has 30 days to halt the sale.

Aug. 20—The State Department reports that the U.S. and Turkey have initiated talks to bring about the transfer of citizens from each other's jails to serve out the balance of their sentences in their own countries; the U.S. and Mexico have a similar pact.

Aug. 21—Senator George McGovern (D., S.D.) calls for international military intervention in Cambodia to halt what he calls "a clear case of genocide."

An 8-member congressional delegation arrives in Hanoi for a 6-day stay, hoping to receive more information about U.S. missing-in-action (MIA) military personnel.

Aug. 22—The State Department formally rejects Senator McGovern's suggestion that the U.S. take part in an international military intervention in Cambodia.

Aug. 25—The U.S. congressional delegation arrives in Vientiane, Laos.

Aug. 27—The congressional delegation returns to Honolulu and calls for the normalization of U.S.-Vietnamese relations.

Aug. 30—President Jimmy Carter tells reporters in Idaho Falls, Idaho, that, although he would be "reluctant" to do so, "in line with our constitutional processes, [he might offer] supplementary guarantees" to station U.S. troops on the West Bank of the Jordan River and the

Gaza Strip, to encourage Israel to withdraw her occupying forces.

Aug. 31—The White House reports that President Jimmy Carter will review the August 9 decision permitting the sale of well-drilling equipment to the U.S.S.R.

Labor and Industry

Aug. 9—New York City's 3 major newspapers, *The New York Times*, the *Daily News* and the *New York Post*, are shut down after the 1,550-member Printing Pressmen's Union strikes against them.

Aug. 14—Texaco, Inc., reports the discovery of appreciable amounts of natural gas in an offshore well it is drilling in the Baltimore Canyon, 100 miles off the New Jersey shore.

Aug. 28—The Postal Service and its 3 major unions reach an agreement shortly before a strike deadline set for midnight: the unions had rejected a proposed contract and Postmaster General William Bolger refused to reopen bargaining sessions. The 2 sides will resume negotiations using a federal mediator; if they do not reach agreement in 15 days, the mediator will resolve the issues.

Legislation

Aug. 1—The House votes 208 to 206 to permit President Jimmy Carter to end the embargo on arms sales to Turkey; the embargo repeal is an amendment to a \$999.3-million foreign military aid authorization bill.

Aug. 8—In New York City, President Carter signs a bill authorizing \$1.65 billion in federal loan guarantees for New York.

Aug. 16—Appearing before the House Assassinations Committee, James Earl Ray says that he did not shoot civil rights leader Martin Luther King, Jr.

Aug. 17—At a nationally televised news conference in Washington, D.C., President Carter says he is vetoing a \$37-billion military weapons authorization bill because the bill authorizes \$2 billion for a new nuclear-powered aircraft carrier, which the President terms unnecessary. He vetoes the bill.

Aug. 22—The Senate votes 67 to 32 to pass a constitutional amendment to permit citizens of the District of Columbia to elect regular members of Congress. The House approved the amendment on March 2 by a 289-127 vote. The amendment goes to the states for ratification.

Military

Aug. 5—In a speech at the commissioning of the \$262-million nuclear missile-launching cruiser, the *U.S.S. Mississippi*, in Norfolk, Virginia, President Jimmy Carter promises that the U.S. will continue to have "naval forces that can never be challenged successfully by any other power on earth."

Aug. 23—The Defense Department reports successful Navy tests using a laser beam to destroy high speed anti-tank missiles.

Political Scandal

Aug. 3—The House Committee on Standards of Official Conduct (Ethics Committee) says that it has accepted a South Korean government offer to allow former South Korean Ambassador to the U.S. Kim Dong Jo to answer written questions about his purported role in the South Korean influence-buying scandal.

Aug. 24—South Korean Hancho C. Kim pleads guilty to tax-evasion charges in U.S. district court in Washington, D.C.; the charges grew out of his connection with alleged

South Korean government influence-buying of congressional members. Kim was convicted on April 18 on charges related to this alleged conspiracy.

Politics

Aug. 2—Representative Philip M. Crane (R., Ill.) announces his candidacy for the Republican presidential nomination in 1980.

Aug. 27—Former President Richard Nixon is host to about 500 Orange County, California, Republicans at a \$250-a-plate party held at his San Clemente estate.

Aug. 29—The National Governors' Conference concludes its 2-day annual meeting in Boston; it asks for a balanced federal budget by 1981.

Science and Space

Aug. 12—Scientists working at Princeton University announce that they have produced an experimental controlled thermonuclear fusion reaction.

Aug. 17—Three American balloonists complete the first successful balloon crossing of the Atlantic Ocean.

VATICAN

Aug. 6—At Castel Gandolfo, Pope Paul VI dies of a heart attack at the age of 80.

Aug. 26—Albino Cardinal Luciani of Venice is chosen Pope by the College of Cardinals; he takes the name of Pope John Paul I in honor of his 2 predecessors.

VIETNAM

Aug. 8—In Peking, representatives from Vietnam and China meet to try to work out plans to accommodate the million ethnic Chinese living in Vietnam.

Aug. 18—A report issued from Hanoi says that 3,000 ethnic Chinese who have been trapped along the Chinese border since July 12 when the border was closed will be permitted to return to their Vietnamese homes.

Aug. 21—A U.S. congressional delegation arrives in Hanoi.

Aug. 23—In Hanoi, Premier Pham Van Dong tells visiting U.S. congressmen that his country is eager for full relations with the U.S.; he says that the remains of 11 U.S. servicemen killed in the Vietnam war will be returned. Dong once again says that his government is dropping demands for \$3 billion in war reparations from the U.S.

Aug. 25—Fighting between ethnic Chinese and Vietnamese border units is reported in the Friendship Pass area.

Aug. 28—In Hanoi, China and Vietnam reportedly break off high-level negotiations on the future of ethnic Chinese in Vietnam.

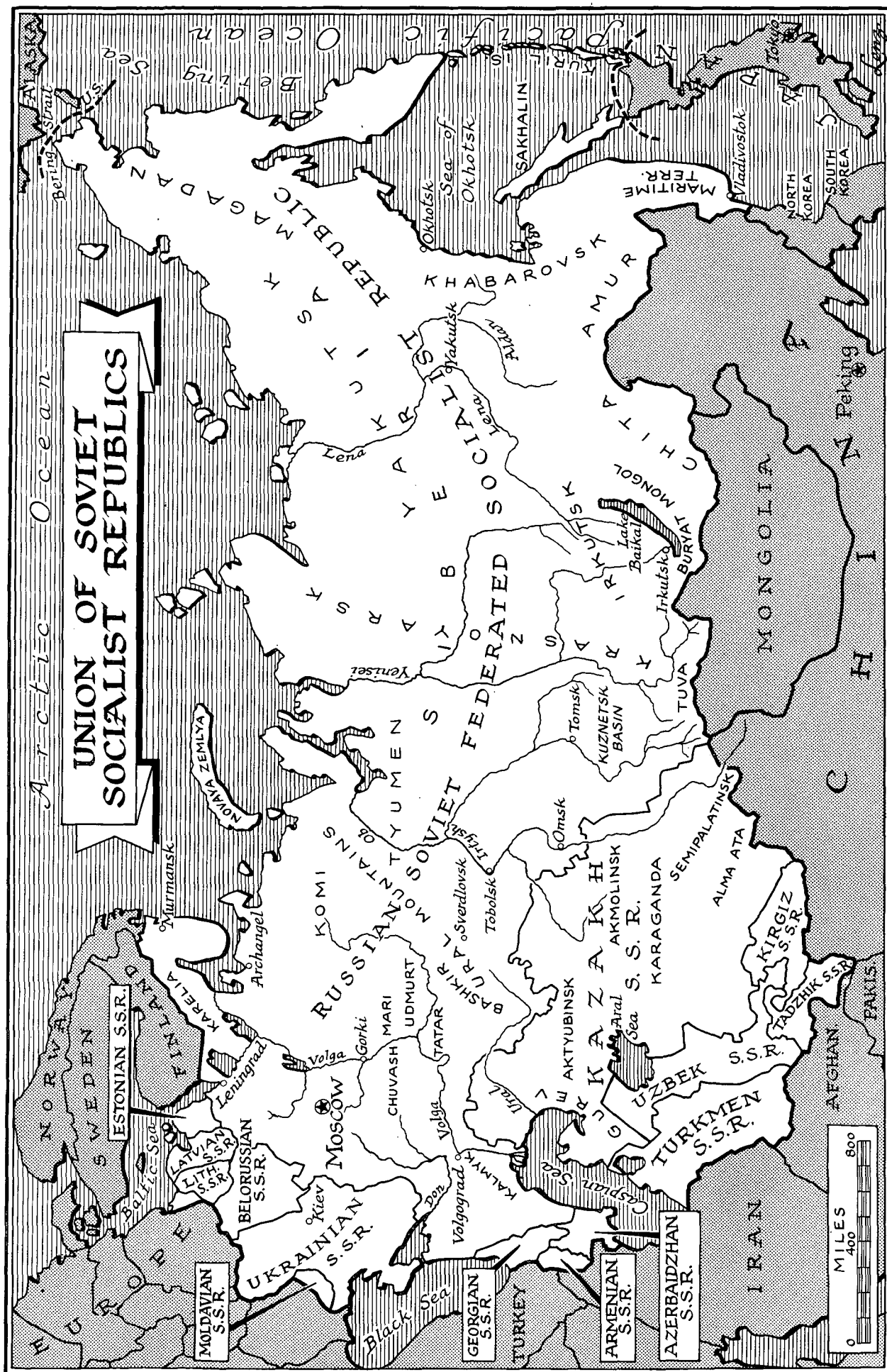
YUGOSLAVIA

(See *China*)

ZAMBIA

Aug. 23—In Johannesburg, South Africa, a military spokesman claims that Zambian troops and South-West African People's Organization (SWAPO) guerrillas fired artillery and rockets on South African troops stationed in Namibia along the border with Zambia; 9 South African soldiers are reported killed and 10 are wounded. Zambian officials deny any involvement.

In retaliation for the attack, South African troops attack SWAPO guerrilla positions in Zambia, killing 16 people. ■



Available From Current History

Academic Year 1978-1979

- | | |
|---|---|
| <input type="checkbox"/> The World Energy Crisis (3/78) | <input type="checkbox"/> Southeast Asia (12/78) |
| <input type="checkbox"/> America's Energy Resources: An Overview (5-6/78) | <input type="checkbox"/> The Middle East, 1979 (1/79) |
| <input type="checkbox"/> America's Energy Policy Tomorrow (7-8/78) | <input type="checkbox"/> Latin America, 1979 (2/79) |
| <input type="checkbox"/> The People's Republic of China, 1978 (9/78) | <input type="checkbox"/> Africa, 1979 (3/79) |
| <input type="checkbox"/> The Soviet Union, 1978 (10/78) | <input type="checkbox"/> India and South Asia (4/79) |
| <input type="checkbox"/> Japan (11/78) | |

Still Available

AREA STUDIES

- ☐ East Europe, 1978 (4/78)
- ☐ Latin America, 1978 (2/78)
- ☐ The Middle East, 1978 (1/78)
- ☐ Africa, 1977 (12/77)
- ☐ West Europe, 1977 (11/77)
- ☐ Canada, 1977 (4/77)
- ☐ Mexico, 1977 (3/77)
- ☐ Latin America, 1977 (2/77)
- ☐ The Middle East, 1977 (1/77)
- ☐ Southeast Asia, 1976 (12/76)

- ☐ Africa, 1976 (11/76)
- ☐ Scandinavia and the Low Countries (4/76)

AMERICAN ISSUES

- ☐ Improving Health Care in America (7-8/77)
- ☐ Health Care in America: An Overview (5-6/77)
- ☐ Reforming the Criminal Justice System (7-8/76)
- ☐ Criminal Justice in America (6/76)
- ☐ Women in America (5/76)
- ☐ The American Economy (11/75)
- ☐ The American Indian (12/74)
- ☐ Changing Black America (11/74)

CURRENT HISTORY BINDER

A sturdy, hard-cover binder at a reasonable cost will protect *Current History* for permanent reference. Each issue can be placed in the binder every month. The easy-to-use binder holds 12 issues securely in place over flexible steel rods.

ONE-YEAR SUBSCRIPTION: \$14.50. **TWO-YEAR SUBSCRIPTION:** \$28.50.

EIGHT-MONTH SUBSCRIPTION: \$11.60.

SPECIFIC ISSUE PRICE: \$1.75 per copy; 10 or more copies of the same issue, \$1.25.
Copies more than two years old, \$2.00 per copy.

EIGHT-MONTH BULK SUBSCRIPTIONS FOR CLASS USE: for 10 or more subscriptions mailed to the same address, \$9.95 each.

BINDER PRICE: \$4.95.

CURRENT HISTORY • 4225 Main Street • Philadelphia, Pa. 19127

SPECIAL SUBSCRIPTION OFFER: your choice of 3 free issues.

- ☐ 1 year \$14.50, plus 3 free issues marked above.
- ☐ 2 years \$28.50, plus 3 free issues marked above.
- ☐ Please send me the issues I have indicated above in the quantities I have marked.
- ☐ Send me 8-month subscriptions.

CURRENT HISTORY BINDER

- ☐ Current History Binders
at \$4.95 each.

Name

Address

City State Zip Code

- ☐ Check enclosed. ☐ Bill me. Add \$1.00 per year for Canada; \$1.50 per year for foreign.

All these offers are good only on orders mailed directly to the publisher.

Specific issue price and bulk subscriptions based on a single mailing address for all issues ordered.

CLEELIB C9 EB 001 C DEC78
CALIF LUTHERAN COLLEGE
LIBRARY
THOUSAND OAKS CA 91360